

**THE FACTORY SYSTEM
AND THE FACTORY ACTS**

THE FACTORY SYSTEM

AND

THE FACTORY ACTS

BY

R. W. COOKE-TAYLOR

F.S.S. ; F.R.HIST.S.

SECOND EDITION, REVISED

METHUEN & CO. LTD.
36 ESSEX STREET W.C.
LONDON

First Published *May* *1894*
Second Edition, Revised . *January* *1912*

PREFACE

HALF-A-CENTURY ago the Factory System meant to the minds of most people a new and portentous phenomenon in industry against which unusual precautions had to be taken lest it should issue in a degenerated race of operative labourers , Factory Acts meant the partial and peculiar body of laws specially devised to avert this catastrophe At the present day both these significations are completely obsolete So far from the Factory System being regarded now as likely to degenerate labourers, it is that persistently recommended by some of the best friends of labour as a happy means of escape from other modes of industry , and the Factory Acts are so little partial in their operation that it is difficult for anyone, not an expert, to say what is and what is not (within the compass of productive industry) excluded from their widespreading influence These great changes seem to require some explanation. The fundamental explanation resides, of course, in

“ The age and body of the time,
Its form and pressure,”

which have welded out those malleable materials into this new mass , but a popular statement of how it all has come

about, and to what extent actually proceeded, should not be out of place either in view of the manifold interests concerned. This is the purpose of the following pages.

R W C-1

PREFACE TO THE SECOND EDITION

THE great changes that have been made in factory legislation since the first edition of this book was published have rendered a considerable revision of the text necessary in the present one. In particular the last two chapters have been in large part rewritten. A remarkable change has come over the whole aspect of industrial matters, and of the attitude of the State towards them, in this country within the last few years, and this is a change that is still proceeding. One of the earliest departments of State to accept the new conditions has been the Department that presides over factory legislation. The consequence is that developments of an unexpected kind, and of an almost revolutionary nature, have succeeded to that normal "broadening down from precedent to precedent" which was otherwise in this instance to be anticipated. The process of these changes is now related in detail, and the story brought up as nearly as possible to the present day. The wide spaces still left uncovered by this insurgent flood of philanthropic effort are briefly indicated, and an attempt is made throughout to harmonize the facts with the essential tendencies of the times and give a consistent appearance to the whole.

R W C.-T

CONTENTS

CHAPTER I

THE FACTORY SYSTEM

Factory—Ancient Factories—Early English Factories—The Domestic System—Spinning Machinery—The First Modern Factory	1
---	---

CHAPTER II

THE FACTORY CONTROVERSY

Philosophy of the Factory System—Philosophy of Factory Legislation—The First Reformers—Parish Apprentices—The Factory Agitation—Robert Peel and Robert Owen—Richard Oastler—Lord Ashley—Other Leaders—Progress of the Controversy—Summary	25
---	----

CHAPTER III

THE FACTORY ACTS

(1802 TO 1833)

Previous Legislative Enactments—The First Factory Act—First Parliamentary Inquiry—Resulting Legislation—The Factory Act, 1831—Sadler's Committee—The Factory Act, 1833	50
--	----

CHAPTER IV

THE FACTORY ACTS

(1833 TO 1867)

The Factory Act of 1833 in Operation—The Relay System—Age Certificates—Renewal of Agitation—Progress of Legislation—The Factory Act, 1844—Some Subsequent Enactments—Second Children's Employment Commission—The Factory Act, 1864—The Factory Act, 1867	76
--	----

CHAPTER V

THE FACTORY ACTS

(1867 TO 1901)

PAGE

The Workshop Regulation Act—The Factory Act, 1871—The Factory Act, 1874—Adult Labour—The Factory Act, 1878— “Sweating”—The Factory Acts, 1883 and 1889—The Factory Act, 1891—The Factory Act, 1895—The Factory Act, 1901	98
---	----

CHAPTER VI

CONCLUDING CHAPTER

Cognate Industries—Chimney Sweeps—Mines and Quarries—Alkali Works—Explosives—Canal Boats—Bakehouses—Shops— Laundries—Transport—Warehouses—Building—Protection and Employment of Children Acts—Truck—Unregulated Occupations—Agriculture—Domestic Service—Home Work —Casual and Vagrant Labour—Literary and Artistic Industry	126
APPENDICES	159
INDEX.	183

THE FACTORY SYSTEM

CHAPTER I

THE FACTORY SYSTEM

FACTORY—ANCIENT FACTORIES—EARLY ENGLISH FACTORIES
—THE DOMESTIC SYSTEM—SPINNING MACHINERY—THE
FIRST MODERN FACTORY

FACTORY—The word Factory is one that has altered much in meaning and is still in process of alteration. Its early signification was that of a trading establishment, usually in a distant country, with which were associated in idea the settlements and surroundings appertaining, and it is primarily defined in this sense even yet in most dictionaries and works on industrial technology. But a quite different signification came to be attached to it later. In this new one it implied a place of *production* not *sale*, an establishment where something was made, or manufactured, and—more specially—made or manufactured for profit, and (commonly) on a large scale, which is also its legal meaning and that with which we have to deal here.

At what time precisely this transformation occurred is uncertain. Dr Aikin, in a *History of Manchester*, published in 1793, uses the words "mill" and "factory" indiscriminately, Mr Baines, in his well-known *History of the Cotton Manufacture*, refers—as late as 1835—to the use of the

latter term in the present sense as still a modern innovation, Ure's *Dictionary of Arts and Manufactures* does not possess any article on the word, in Dod's *Dictionary of Manufactures, etc* (1876), no allusion to an altered meaning is made, and in the last edition (1880) of McCulloch's *Commercial Dictionary* it is merely described as an abbreviation of *Manufactory*. The nearest approach to a definite date that the present writer has been able to find is in French's *Life and Times of Samuel Crompton* (Manchester, 1862), where it is stated that in the year 1792, "the word 'factory' occurs almost for the first time in the rate-books of the township" (Bolton),—a sufficiently unsatisfactory one it must be allowed.¹

What is at all events certain is, that at the commencement of the present century, namely as early as 1802, this term was interpreted in a modern sense by the English legislature. In that year the first Factory Act (42 Geo. III, c 73) was passed, being entitled "An Act for the Preservation of the Health and Morals of Apprentices employed in Cotton and other Mills, and in Cotton and other Factories", where the words *mill* and *factory* are used as complementary or exchangeable terms but are nowhere defined, while the older signification of the latter is obviously abandoned. In a succeeding statute (3 & 4 Will. IV., c 103), in which the area of restrictive legislation was considerably enlarged, they are again found coupled together as descriptive of places where certain productive operations are performed, and still with no separate meanings attached to them, and it was not in fine until a much later one (7 & 8 Vic., c 15) that this deficiency was at

¹ For an extended analysis of the terms Factory, Factory System, Mill, Manufacture, etc., see *Introduction to a History of the Factory System*, chap. i. (R. Bentley and Son, 1886).

length made good and the title "factory" for the first time fixed by law. The seventy-third section of the last-named Act recites as follows—"the word 'factory'

shall be taken to mean all buildings and premises situated within any part of the United Kingdom of Great Britain and Ireland wherein or within the close or curtilage of which steam, water, or any other mechanical power shall be used to move or work any machinery employed in preparing, manufacturing, or finishing, or in any process incidental to the manufacture of cotton, wool, hair, silk, flax, hemp, jute or tow, either separately or mixed together, or mixed with any other material", the expression "mill" not being used herein at all, except in connexion with "mill gearing," between which and *machinery* some nice distinctions are drawn, which do not concern us now. At this time then a factory meant simply any place devoted to spinning or weaving certain fabrics by power, that is it pretty nearly fulfilled what was until quite recently the popular conception of the term, the elder one being meanwhile in abeyance while not actually abandoned.

Scarcely was it settled in that signification however when another new development occurred. The circumstances that led to that new development, and the changes which resulted from it, are of cardinal importance in the history of English factory legislation. They will form the substance of some future chapters. It will suffice to say of them at present, that the general result was greatly to expand the notion of what constituted a factory beyond the characteristics here indicated, to a point that has not even yet been very clearly defined or ascertained.

ANCIENT FACTORIES—The modern conception of a factory, then, is of a place of production, where labour is

congregated and divided within an establishment of definite bounds, sometimes with and sometimes without the aid of exterior motive power, and subject to other definition by statute. Congregated labour is in this view the very body, as divided labour is the spirit of any factory system, and in this connexion it will be of interest to inquire to what extent factories and the Factory System were known, and were availed of, in ancient times, from which we have so much more to learn on social and industrial matters than we are often willing to allow. Unfortunately the information that is accessible on these points is extremely scanty. Writers of antiquity—those especially of the Classical age, with whose works we are the most familiar—had an inveterate scorn of trade and industry, things which they considered as in their nature mean and sordid, and beneath the dignity of history. Aristotle would allow the title citizen only to those who needed not to earn a livelihood by labour (*Politics*, iii 3), and held the highest industrial duty of a freeman to consist in making proper use of his slaves, Cicero regarded commerce as tolerable only when carried on upon a large scale and primarily for the benefit of the State, while the Emperor Augustus actually pronounced the sentence of *death* against the senator Ovinius for having stooped to direct a manufactory.¹ Such writers have left, accordingly, scarcely any trustworthy accounts of these matters, and we have to seek information upon them among the chance allusions of poets and travellers, in the sacred books of a few old nations, and, more hopefully of late, from the great results of modern antiquarian and anthropological research. With these aids we are able to throw a little light at length on this

¹ Blanqui's *History of Political Economy in Europe*, p. 49 (Bell and Sons, 1880).

neglected branch of inquiry. We know now for certain that a system of production by means of organized labour not only did exist among very ancient races, but was a device familiar to times so remote as to long precede the dawn of history, to be, in fact, a recognized feature of the early Stone age, in the very infancy of mankind. Sir Charles Lyell (*Antiquity of Man*) was the first writer to direct attention to a "manufactory" of stone implements near Beine in Switzerland, and since then many have been discovered elsewhere, in France, in the United States, and largely of late years in Ireland. In a little book, *Who are the Irish?* (Bogue and Co., 1880) we read, for example, not alone of "primeval diggings," whence flint was procured for industrial purposes in remote ages, but it is added, "vast manufactories were there established." "At Cissbury in Sussex," writes Dr Isaac Taylor (*Origin of the Aryans*, p. 181), "there must have been a regular factory of neolithic implements"¹. Their existence has become in fact a scientific commonplace. That great factories were a feature of the labour system of ancient Egypt seems likewise certain. How else, to begin with, could all the linen, linen yarn, and other commodities so largely exported have been produced there? Domestic industry might suffice, indeed, for the supply of native needs, but not for such a foreign trade. Moreover, most writers who have expressed themselves on the subject at all have come to that conclusion. Treating of "recent discoveries in Egyptian antiquities" already fifty years ago, Dr Cooke Taylor bears the following testimony: "We find from them," he says, "that the Pharaohs had very large spinning

¹ See also *Life in Early Britain*, by Bertram C. A. Windle, pp. 22, 45 (D. Nutt, 1897), and *Early Man in Britain*, by Dr Boyd Dawkins, p. 276.

establishments, such as we should in the present day call factories, so that there was not only enough of yarn left for home consumption in the valley of the Nile, but also for exportation " (*Silk, Cotton and Woollen Manufacture*) Mr James (*History of The Worsted Manufacture*, p 5), is no less explicit " The Egyptians," he says, " resembled ourselves in this, that they possessed large *weaving* establishments, and supplied with their products foreign lands ", and Mr Warden (*Linen Trade Ancient and Modern*) offers even a description of such places, to the effect that they were " of a kindred nature to the hand-loom weaving shops, not yet extinct in this country " (Scotland). Lastly, M Maspéro, one of the latest and most accomplished writers on Egyptian archæology, actually locates some of them, and even traces their descent to the present day. Writing of the reign of Rameses II (i e the fourteenth century B C), " Apu," he says, " is celebrated for its spinning mills " —adding in a note: " The spinning mills of Ekhurem (Apu) still exist, their chief manufacture is a material with little blue and white checks, of which the fellah women make their outer garments " (*Ancient Egypt and Assyria*, p. 74).

The evidence from ancient Babylonia and Assyria is equally convincing, but space will not admit of its being given. It shall suffice to quote the observation of Bonomi (*Nineveh and its Palaces*), that Semiramis is " stated by many writers of antiquity to have founded large weaving establishments along the banks of the Tigris and Euphrates " It must be allowed, however, that this testimony would have been more satisfactory had the author furnished the names of the " many writers " referred to, not to do more than mention certain historic doubts concerning Semiramis herself.

Of the great dye-houses, and glass and metal works of Phœnicia, the (possibly) great silk and porcelain factories of ancient China of the woollen manufactures — so renowned—of Lydia, Phrygia and Persia, the carpet manufacture of old Carthage, the metal-work of Athens, we must not pause to treat¹, we know, indeed, extremely little of them, nor is the subject very closely related to our theme. Instead, we may proceed at once to the next great civilization of the ancient world, to Rome in the plenitude of her power. There is no doubt that the Factory System was largely availed of both in ancient Italy and her colonies. Not to go beyond our own experience for an example, we are aware that the Romans established a great woollen factory for clothing their troops at Winchester, and immense potteries in many parts of the country. They had also a "Fabrica," or vast military forge, at Bath. Mr Scrivenor (*History of the Iron Trade*) gives the following very graphic account of it: "The *fabrica*. was a large college of armourers, where the varied weapons used by the Roman soldiers were manufactured. The business of this society, and the laws which regulated it, are developed by the Theodosian and Justinian codes. It there appears that towards the commencement of the second century the army smiths were created into companies, each governed by its own president or head, denominated the *primicerius*, that the employment of these bodies was to make arms for the use of the legion or legions to which it was attached, at public forges or shops, called *fabricæ*, erected in the camps, cities, towns, or military stations, that these arms when forged were to be delivered to an officer appointed to receive them, who laid them up in arsenals for public

¹ This branch of the general subject is dealt with at some length in my *Introduction to a History of the Factory System*, chap. II.

service, that to prevent any abuse in this important branch of military economy, and to ensure its proper and methodical management, no person was permitted to forge arms for the imperial service unless he were previously admitted a member of the society of the *Fabri*, that to secure the continuance of their labours after they had been instructed in the art a certain yearly stipend was settled on each armourer, who (as well as his offspring) was prohibited from leaving the employ till he had attained the office of *primicerius*, and, finally, that in order none might quit his business without detection, a mark or *stigma* was impressed upon the arm of each as soon as he became a member of the *Fabrica*. But it was not in her colonies only that Rome availed herself of the Factory System. We learn from Blanqui¹ that, about this time, Italy itself "was full of manufactories . . . where paid workmen shared with slaves consigned to the rudest tasks, the fatigues, though not the profits of manufacture"—from which we are not to infer, however, that there were free operative labourers as well as slaves there, but rather many free overseers, who were requisite to keep the slaves in order, and who had no closer interest in the work.

These two descriptions of the interior economy of Roman factories, brought thus together, are very interesting. We view herein the actual operation of two archaic forms of the organization of labour which, in one mode or other, have prevailed from an immensely remote past, and may quite possibly prevail again. The collegiate or *guild* system would not, of course, be always necessarily in the service of the State, nor the servile organization always outside it, on the contrary, the opposite of this was more commonly the case. But whatever their civil circumstances

¹ *History of Political Economy*, page 54.

they are types of extraordinary persistency in the industrial history of mankind, beside which the devices of to-day directed towards the same end can but be considered immature, experimental, and exceptional, and are probably temporary at the best

EARLY ENGLISH FACTORIES —When the Romans retired from Britain, the great works they had established there for the manufacture of textile fabrics, of metal, and of earthenware were closed, and for eight or nine hundred years there were no factories. The nearest approach to such places remaining were the workmen's quarters attached to religious houses, to the castles of the more powerful nobles, and the king. In these, but especially in the first-named, whatsoever industry was left other than of the purely isolated kind was to be found, but it was agglomerated not combined industry, the operatives worked under no general labour system, and the produce was for use, not profit. Gradually, after the conquest by the Normans, other developments occurred. First, the early Norman sovereigns brought many skilled workmen over in their trains who were forthwith endowed with certain privileges, settled in selected districts, and given the opportunity of starting on an independent career, and next, industrious foreigners came over occasionally of their own accord, whether induced to do so by political or topographical causes or by the mere love of change and hope of gain. In the reign of Henry I, in particular, a considerable colony of Flemish weavers, driven across the sea owing to inundations in their own country, settled here, and were established by him chiefly on his northern and western frontiers, where they acted as a protection against the incursions of the Scotch and Welsh. Under the Plan-

tagenets, and while our kings were often abroad, these workmen colonies increased in prosperity, and at about this time we begin to read of "factories of a rude kind" set up in various parts of the country¹ Such factories were probably *fulling mills*, and it is in connexion with one of them that Manchester makes a first appearance in industrial history with "a fulling mill on the banks of the Irt" (1301), Halifax and Bradford (in Yorkshire) being each noted as in possession of another at about the same period. In the neighbourhood of these, other buildings would often gather in time, where the cloth—still spun and woven at home—might be dyed, and subjected to other processes, or where possibly all processes of manufacture might occasionally be accumulated in a single establishment, and in such a one, accommodating a congeries of free workmen in the service of a capitalist employer, we have the germ of the modern Factory System.

A great advance was made in the reign of Edward III. Edward had married a Flemish princess, Philippa of Hainault, and it is to that union—indeed to the queen's own personal interest and efforts it is said—that England owes the re-establishment of her woollen manufacture on a large scale² Thenceforth progress was uninterrupted, uninterrupted even by those terrible scourges the Black Death and Wars of Roses, or, at the worst, only temporarily interrupted, to start afresh with redoubled vigour. By the time the Tudors were firmly seated on the throne undoubted evidence is found of the existence of large textile factories, not inconsiderable even in comparison with many of the present day. The most notable (in the reign

¹ *Romance of Trade*, p. 103

² The story is told with much quaintness of detail by Fuller, *Church History*, Book III.

of Henry VII) was that of John Winchcombe, Wynchcomb, or Whitcomb, commonly called "Jack of Newbury," but whose real name was John Smallwood—Winchcombe being the Gloucestershire village whence he originated, and Newbury the town in Berkshire where his works were situate Fuller writes of him (*Worthnes of England*) "He was the most considerable clothier without fancy and fiction England ever beheld . His looms were his lands, whereof he kept one hundred in his house, each managed by a man and a boy," a house that would "now make sixteen clothiers' houses, whose wealth would amount to six hundred of their estates" From another account we gain a still more imposing idea of this establishment, namely from Thomas Deloney's metrical romance "Jack of Newbury," published in London in 1596¹ We read in it of *two hundred looms within one room*, of "one hundred carders," "two hundred spinners," one hundred and fifty children employed as wool pickers, fifty shearers, eighty "rowers," forty dyers, and twenty fullers, in all over one thousand persons occupied together in manufacture! This is a very large number for even a modern woollen factory of the most extensive kind The names of three other factory masters belonging to this era have come down to history, Cuthbert of Kendal, Hodgkins of Halifax, and Martin Brian, or Byron, of Manchester "Each of these," says Anderson (*History of Commerce*, vol. II.), "kept a great number of servants at work—carders, spinners, weavers, dyers, shearers, etc", and there were no doubt others whose names have not been preserved About the same time metal factories began to be established also, principally for the manufacture of iron Iron and iron

¹ Quoted at some length in *The Modern Factory System*, p. 50 (Kegan, Paul and Co., 1891).

products had been little made in England from the departure of the Romans till the reign of Edward III, when some evidence of a native manufacture is given in an Act of Parliament, passed in 1354, forbidding their export, while over a hundred years later (1483) another Act, prohibiting the importation of a great variety of metal goods, seems to show that this industry had spread. But by that time the great Sussex iron manufacture had arisen. Mr Smiles' *Industrial Biography* (chap. 11) gives a graphic and very interesting account of this industry, and how considerable it really was one may further learn from the statement of Simon Sturtevant, a German metallurgist, who (in his *Treatise De Metallica*) estimated the number of iron mills in England and Wales in 1612 at eight hundred, of which, he says, "there are four hundred milnes in Surry, Kent, and Sussex alone." Wood was the fuel exclusively used, the establishments were owned by private capitalists, and the organization of labour was of the nature of the modern factory system.

The material prosperity thus indicated continued to grow under the Stuarts, and throughout the civil wars, in spite of the political complications of the time, and it received a powerful stimulus from successive immigrations of Protestant refugees, driven out of the Netherlands and France respectively by the infatuated policy of the rulers of those countries. These immigrants introduced a great variety of new industries, which rapidly took root. A further stimulus to enterprise was the founding of British colonies, which now began on a pretty extensive scale. Hitherto English manufacturers had had to depend on a home demand mostly, or their products were sold to a few foreign merchants at local fairs; henceforth there were illimitable possibilities before them. The Factory System continued

to spread under such circumstances, and great efforts were made to cope with the increased opportunities thus originated. Sir George Nicholls (*History of the English Poor Law*) mentions that in the reign of William III. several of the clothiers of Norwich "employed as many as five hundred hands", which he evidently thought an unprecedented number. The industrial genius of the country, in short, was thoroughly aroused, and was preparing for further great changes in store.

THE DOMESTIC SYSTEM —But in the meanwhile another mode of industry had taken root in our congenial soil, rivalling for a while this nascent Factory System, sometimes even successfully. It has come to be called the Domestic System, by which is meant not merely family labour for purposes of domestic utility, nor what is now designated "home work," but an organized system of production for sale and profit, responding to no impulse but its own, and dominated by no other productive organization. Family industry may exist, of course, in every industrious home circle, and when this is hired out on the same economic basis as factory labour will correspond economically with it, but an independent manufacture, spontaneously developed, untrammelled by tradition, custom, or law, producing commodities for an open market, this is by no means the same thing.

The origin of the Domestic System dates in England from the decay of the municipal and feudal constitutions of society, the first the legacy of the Roman, the second of Norman dominion. It is not implied in this statement that either of those systems was extinct when it had its rise, they are not extinct yet; what is meant is, that as they ceased to closely overshadow the whole national life, certain

movements began below the surface of society, which by degrees made themselves manifest above, resulting in changed currents of thought and action among the people. The present was one of these. It was, like the early factory system, much indebted to constant immigrations of foreigners for its support, who were in turn much indebted to the peculiar circumstances and institutions of this country for the welcome they received. The bye-laws of guilds, corporations and trade fraternities of various kinds; which had succeeded the imperial organizations of ancient Rome, had become at length so oppressive and pernicious as to draw from Lord Bacon their denunciation as "fraternities in evil," and already in Henry VII's reign an Act of Parliament (19 Henry VII) had been passed restraining them from promulgating further rules, while the disuse of walled towns, proceeding conterminously, gave industry an opportunity of spreading out into the country that it had not enjoyed before. Foreign artisans, and their English brethren, "began therefore to settle in such towns less than heretofore, and more in their vicinities, or even to seek voluntarily, as they had formerly been compelled to accept (p. 9) for their locations wild and unfrequented districts, where a patch of land could be had for the asking (or without it), and the means of livelihood thus to some extent secured"¹ The cutlery trade of Sheffield, the woollen trade of Yorkshire, the miscellaneous trades of Birmingham, and the great cotton trade of Lancashire, were founded under such conditions. All of these were handicraft industries at first and followed the method of domestic labour. The unit was the family; not the corporate society, whether self-composed or superimposed. The labour supplied was free; that is, civilly

¹ *The Modern Factory System*, p. 57.

free, it was not slave labour. The master manufacturer was also workman, he was the owner of his instruments of production, the arbiter of his own industrial life. Occasionally the circle would be widened by the admission of strangers, but they were admitted as members of the household,—domestic workers with the rest. Very divergent opinions have been expressed respecting the social advantages of this mode of industry. On the one hand it has been lauded to the skies as the very perfection of industrial arrangement, on the other very severely criticized by very capable observers¹. One hundred—or even fifty—years ago there seemed an almost unanimous opinion in its favour, and against the Factory System, on the sentimental side at least, to-day the tide of opinion is flowing in precisely the opposite direction. Into this controversy we cannot enter here, it will be more to the purpose to illustrate the actual working of this Domestic System, to which end two typical descriptions of it will be cited, one from textile manufacture, in which beyond all others the points of contrast with the factory system are usually held to be best defined; the other from the cutlery industry, next to textile perhaps the most famous of British manufactures. Mr William Radcliffe,² describing his own experiences of a manufacturing district of Lancashire just before the coming change, expresses himself on this subject as follows —“In the year 1770 the land in our township was occupied by between fifty to sixty farmers, rents to the best of my recollection did not exceed ten shillings per statute acre, and out of these fifty or sixty farmers there were only six or seven who raised their rents directly from the

¹ See in particular the caustic remarks of Mr Carroll D. Wright *Report on the Factory System of the United States* (Washington, 1884).

² *Origin of Power Loom Weaving*, pp. 59, 60 (Stockport, 1828)

produce of their farms, all the rest got their rents partly in some branch of trade, such as spinning or weaving woollen, linen, or cotton. The cottagers were employed entirely in this manner except for a few weeks in the harvest. Being one of these cottagers, and intimately acquainted with all the rest, as well as every farmer, I am better able to relate particularly how the change from the old system of hand labour to the new one of machinery operated in raising the price of land. Cottage rents at that time, with a convenient loom shop and a small garden attached, were from one and a half to two guineas per annum. The father of a family would earn from eight shillings to half-a-guinea at his loom, and his sons, if he had one, two, or three alongside of him, six or eight shillings per week, but the great sheet anchor of all cottages and small farms was the labour attached to the hand-wheel, and when it is considered that it required six or eight hands to prepare and spin yarn of any of the three materials I have mentioned, sufficient for the consumption of one weaver, this shows clearly the inexhaustible source there was for labour for every person from the age of seven to eighty years (who retained their sight and could move their hands) to earn their bread, say from one to three shillings per week, without going to the parish. In this extract we notice the shadow of one of the great changes that was approaching, the employment namely of more efficient labour-saving machinery. In the next to be made we shall perceive the development of a still more fundamental one, the increasingly dominant position accorded to realized wealth as an agent in production.

Sheffield had been famous for its cutlery as early at all events as the time of Chaucer (who alludes to it), but previous to the commencement of last century had "dis-

covered in the manufacture"—says Dr Aikin¹—"more of industry than ingenuity" The workmen "dared not exert their abilities in labour for fear of being overstocked with goods their trade was inconsiderable, confined, and precarious" But, "in 1751 the river Don was made navigable to within three miles of the town . a stage waggon was set up . master manufacturers began to visit London in search of orders with success, and several factors established a correspondence with various parts of the Continent" The proceedings of these *factors* were noteworthy "The common arrangement between masters and workmen during the early and comparatively unfluctuating periods of the cutlery manufacture was, that the former found shop-room, tools, every description of materials, and, of course, such capital as was necessary to carry on the business, paying the latter for work done generally by the piece During this state of things almost all dealings in the raw material and finished articles were conducted between the master manufacturer and those who visited the town for the purpose of buying his wares, or with the merchant, to whom consignment was made for exportation Later years, however, witnessed the springing up of a large and influential class of moneyed or speculative individuals, who, under the denomination of factors, took advantage of the fluctuation of the markets to collect goods and merchandise at a cheap rate, never purchasing at the regular prices when they could avoid it These enterprising dealers presently obtained large influence in the foreign markets, and, catching the full spirit of modern competition, they soon distanced the tradesmen of the old school" "The latter indeed,"—he continues—"frequently became,

¹ *A Description of the Country from Thirty to Forty Miles round Manchester* (1795)

through necessity, first satellites, and then victims to the new system" This is a very interesting description of a form of domestic industry differing in several particulars from that before mentioned, as well as a concise summary of results flowing from the more fundamental economic influence last alluded to, which was the origin of many others hereafter to be named At present, our attention is most required to the particular phase of change which first attracted the attention of the legislature, the development and application, namely, of labour-saving machinery in production.

SPINNING MACHINERY —In the description of the domestic industry of Lancashire just quoted, it was shown how it required in Radcliffe's time "six or eight hands to prepare and spin yarn sufficient for the consumption of one weaver" So long as English manufacture was principally for the home trade this disproportion was comparatively unimportant, producers could adapt themselves without much difficulty to the wants of consumers, or if they failed to do so the latter must wait The disproportion itself was to the advantage of spinners, who were a very deserving class of the community, and whose extra opportunities in this direction enabled them to bear with some success the decreasing gains from agriculture But when England became a great Colonial power, distancing all competitors in commerce and commercial enterprise, such was the case no longer. The demand for her fabrics (and all other products of manufacture) became overwhelming, and every known expedient was resorted to for increasing them. It was under these circumstances that certain ingenious men set themselves the task of trying if yarn (the demand for which we have seen was especially great) might

not be spun by machinery. The movement seems to have attained importance first in Birmingham, where Lewis Paul and John Wyatt took out a joint patent for this purpose in 1738,¹ and where it is quite possible the process of rolling metal wire, which might be seen in operation any day in the neighbourhood, furnished them with the first hint. After several unsuccessful endeavours to make their invention profitable they abandoned it. Nevertheless the enterprise was not unfruitful. The idea spread. In 1761 the Society of Arts is found offering prizes of £50 and £25 respectively for the best and second best "inventions of a machine that will spin six threads of wool, flax, hemp, or cotton at one time, and that will require but one person to work and attend it", and the records of that Society show that several machines were submitted in response to this appeal, though apparently without result. But in the meanwhile a poor hand-loom weaver of Blackburn, James Haigreaves, had—quite independently it would seem—devised an instrument of just this kind for his own use, and was applying it with success. And just about the same time another poor workman, one Thomas Highs, or Hayes, of Leigh, Lancashire, had, in conjunction with a local clockmaker, produced still another, which came under the notice of a Bolton barber, one Richard Arkwright, with important consequences, as we shall see, while eventually, Samuel Crompton, likewise of Bolton, by uniting the principles of these two in one (called on that account "the Mule"), brought spinning appliances to so high a degree of excellence that the old type of labour became

¹ John Kay, of Bury, had taken out a patent for spinning worsted before this, namely, in 1730, and there is mention of a much earlier one than either (1678), in the joint names of Richard Dereham and Richard Haines, of which, however, nothing further is known.

obsolete and an entirely new era was inaugurated in this department. How, presently, these cardinal inventions were supplemented by others, equally important to the end in view, and how, ultimately, the Rev Mr Cartwright, a clergyman of the Church of England, succeeded in constructing a mechanical loom which accomplished for weaving what had been already done for spinning would occupy more space to tell than we have at command now, as likewise it would to record other great inventions of this time applicable to other branches of industry, and the application to all of them at length of a completely new motor (steam) destined to start them on a career of unexampled prosperity. It will answer our purpose best to take this prodigious advance in textile manufacture as a type of what was going on throughout all industry, and to concentrate attention for the present on that

THE FIRST FACTORY—It has been generally assumed that with the perfecting of the mechanical appliances for spinning, and the application to them of external motive power, the modern Factory System came into existence, and that this was largely the work of Richard Arkwright. There is thus much truth in the belief, that it was probably the genius of Arkwright which first saw clearly the full possibilities inherent in the new machinery; and it was undoubtedly his untiring energy and ability that brought them earliest to a full fruition. But he was not the inventor of the spinning machinery (the "water frame") with which his name is most closely associated, nor was he by any means the first to apply mechanical power successfully in textile manufacture. Arkwright's first regular factory (at Nottingham) was driven by horse-power, and the idea of the machinery employed there was borrowed (or purloined)

from Highs. It was not until 1770 that he occupied a small water mill (at Wirksworth, in Derbyshire), nor until the year after that he formed his celebrated partnership with Need and Strutt of Derby, which resulted in the building of the well-known Cromford works. Now, fully half-a-century before this time, a textile factory, answering in every respect to even the most modern definition of that term, had been in full operation in England. Further it was not in connexion with any of those staples (wool, flax, or cotton) upon which the inventors of spinning machinery had hitherto exercised their ingenuity that it had its origin, but with quite another fibre. It was a silk mill, begun in Derby in 1715, and at work there shortly afterwards. The story of its establishment forms one of the strangest and most romantic episodes of industrial history, rich as that history has ever been in such.

It is known that the process of "throwing" silk (a process analogous to, but not the same as spinning) was practised in England as early as 1562, when the *throwsters* of London were united into a fellowship, to be afterwards incorporated by Charter in 1629. Half-a-century later we learn that "the said Company of silk throwsters employs above forty thousand men, women and children" (13 & 14 Chas II, c 15), and this astonishing prosperity seems to have continued till towards the end of the seventeenth century, at which time unusually large quantities of thrown silk (or "organzine") began to make their appearance on the English market, sent from abroad, and offered at prices much below what this commodity could be produced for here. The supply, it was noticed, came mostly from Italy; and it was soon rumoured that "something like in appearance to the machinery of a great water-mill (*i.e.* water-driven corn mill) was used to perform the delicate operation

of unwinding the cocoons, and that, thus assisted, it was possible for human labour to produce almost any required quantity of organzine"¹ A practical silk throwster, one John Lombe, who had been in business in London, determined to personally investigate the truth of these reports, he went over to Italy in disguise, and managed to get engaged at one of the factories supplying the mysterious filament His adventures there were of a truly astonishing kind² He not only found that the above report was true, but managed to obtain drawings of all parts of the machinery, to transmit them home in safety, and eventually to follow them himself With these in his possession, and in conjunction with his brother, afterwards Sir Thomas Lombe, a factory similar to the Italian one was erected on the banks of the Derwent, which presently produced organzine equal in quantity and quality to all needs "This amazingly grand structure," as Anderson (*History of Commerce*, vol III, p 91) calls it, "was propelled by mills which work three capital engines," and contained "twenty-six thousand, five hundred and eighty-six wheels, and ninety-seven thousand, seven hundred and forty-six movements, which work seventy-three thousand, seven hundred and twenty-six yards of organzine silk thread every time the water wheel goes round, being thrice in one minute, and three hundred and eighteen millions, five hundred and four thousand, nine hundred and sixty yards in one day and night . . . One water wheel gives motion to all the other movements, of which any one may be stopped separately without obstructing the rest"; and "one fire engine conveys warm air to every individual part of this vast

¹ *Introduction to a History of the Factory System*, p 358

² The story is told very graphically in Knight's *Old England*, Book VII., chap. II., where also a picture of Lombe's factory may be seen.

machine, containing in all its buildings half a quarter of a mile in length " Other details, from a little work of not much pretension, *All about Derby*, by Mr Edward Bradbury (Simpkin and Marshall, 1884), may with advantage be compared with these

This edifice was almost without doubt the first English factory in the modern sense. It was the first, that is, where the motive power was supplied from outside, where operations of manufacture, hitherto performed by human hands, were performed by inanimate machinery thus set in motion, and where independent workpeople, congregated in one building, were occupied in production about this machinery. It was something very different, for instance, from the great textile factories that had preceded it, either here or in more ancient times. Congregated and divided labour was employed in them also, but the operations of manufacture were not performed by machinery, nor was the motive power supplied from outside. The motive power and machinery alike were for the most part embodied in sentient human creatures. It was different again from the early English iron works, in Sussex and elsewhere, to which allusion has been made, and still more different from the great metal factories and potteries of the period of the Roman occupation. In the former of these water-power was sometimes used also, to move the great tilt hammers, and for other purposes, but such establishments were wide open spaces, where the workers were much scattered, never collected altogether in a single building. Water-power may have been employed about the latter likewise,¹ but we have seen from the instance of the *Fabrica*

¹ Water-driven corn mills were introduced into Britain by the Romans, and there are some symptoms that water-power was also used by them about mines.

at Bath how different was the organization of labour. In those old times the worker was tied to his work by the unequivocal compulsion of law or usage, as he was, or is, or may be to this day in countries where political despotism prevails, or trades are divided into castes, or occupations are hereditary. But under the modern factory system in this country the contrary of all that was from the first the case. The workers under this system were personally free, they were bound neither by law nor custom to any particular factory nor kind of manufacture, but at liberty to transfer their labour wheresoever, to whomsoever, and as often as they would, whereby quite different relations were established between them and their employers, involving quite different considerations, and, at length, formal regulations, the regulations namely which came to be, and are continuing to be, embodied in our ever-expanding Factory Acts.

CHAPTER II

THE FACTORY CONTROVERSY

PHILOSOPHY OF THE FACTORY SYSTEM—PHILOSOPHY OF
FACTORY LEGISLATION—THE FIRST REFORMERS—PARISH
APPRENTICES—THE FACTORY AGITATION ROBERT PEEL
AND ROBERT OWEN—RICHARD OASTLER—LORD ASHLEY—
OTHER LEADERS—PROGRESS OF THE CONTROVERSY—
SUMMARY

PHILOSOPHY OF THE FACTORY SYSTEM —At the conclusion of the last chapter an attempt was made to indicate certain characteristics of the modern Factory System distinguishing it from others which have preceded, or may have preceded, it in more or less ancient times. That attempt leads naturally to the question, what actually is this System? —a more difficult one to answer than might appear at first sight. The Factory System — says Dr Ure ¹— “designates the combined operation of many orders of workpeople, adult and young, in tending with assiduous skill a series of productive machines, continually impelled by a central power.” But this definition fails in two directions. On the one hand it fails by including machinery and a central motive power among necessary characteristics of the Factory System, whereas they are only characteristics of the modern form of it, and, on the other hand, it fails to

¹ *Philosophy of Manufactures*, pp 13, 14.

include, or even to indicate, many classes of works now generally recognized as being within the meaning of this expression. It includes, "such organizations as cotton, flax, silk and wool mills, and also certain engineering works", but it excludes "those in which the mechanisms do not form a connective series, and are not dependent on one prime mover," such as "iron-works, dye-works, soap-works, brass-foundries," etc. "Some authors, indeed" — Dr Ure continues — "have comprehended under the title *factory* all extensive establishments wherein a number of people co-operate towards a common purpose of art, and would therefore rank breweries, distilleries, as well as the workshops of carpenters, turners, coopers, etc., under the Factory System. But I conceive that this title in its strictest sense involves the idea of a vast automaton, composed of various mechanical and intellectual organs, acting in uninterrupted concert for the production of a common object, all of them being subordinated to a self-regulating moving force." "If," he concludes, "the marshalling of human beings in systematic order for any technical enterprise, were allowed to constitute a factory, this term might embrace every department of civil and military engineering — a latitude of application quite inadmissible." It is not easy to follow this reasoning. There are few manufacturing establishments where machinery in a "connective series" plays a more important part than in the modern brewery and distillery, and where the proportion of manual to machine labour is distinctly less. Here, if anywhere, it is that the idea of a "vast automaton" is most nearly realized, and that it is possible for the organism to go on performing its productive functions under the impulse of "a self-regulating motive force" with the least human supervision. Moreover, this definition is certainly too recondite for

ordinary use "An automaton composed of various mechanical and intellectual organs, acting in uninterrupted concert," is a definition of the Factory System which, even if technically correct, would be of little practical usefulness and the technical correctness of which is extremely doubtful¹ Nor is there much danger, one would say, that the expressions "factory" and "factory system" should ever be so expanded in meaning as to embrace civil and military engineering. It is surely one of the essentials to the proper conception of either that their purpose is production always, while the eventual purpose of all military labour is of course destruction. Or even in those cases where works of civil and military engineering might be turned to productive use, as in the building of roads and bridges, in so far as these are instruments of production they may be classed as such but not as products of manufacture. They are in reality means of transport² A more recent writer essaying to describe the Factory System under cover of defining the term factory, goes to an opposite extreme "A factory," writes Mr Carroll D Wright (*Report on the Factory System of the United States*, 1884), "is an establishment where several workmen are collected for the purpose of obtaining greater and cheaper conveniences of labour than they could procure individually in their homes, for producing results by their combined efforts which they could not accomplish separately, and for preventing the loss occasioned by carrying articles from place to place during the several processes necessary to complete their

¹ See p 3

² That the above was not merely a rhetorical slip of Dr Ure's is proved by his elaborating the same idea in another work of equal pretension, *Cotton Manufacture of Great Britain* (C Knight, 1836). "War," he there declares, "was in reality the staple trade, the sole factory system of the ancient world" Vol 1 p 3.

manufacture." Here, it will be noticed, machinery and mechanical moving power are entirely omitted, and attention is fixed on other means of abbreviating and facilitating human labour. And on the whole this is the truer conception, for in ultimate analysis the employment of machinery and exterior motive powers are but particular instances of this same effort to abbreviate labour. Only, in this case, too much stress seems to be laid on the purely personal, apart from the mechanical element in production, which is so obvious a feature of the modern system. How would it be for instance, one may ask, if Dr Ure's conception of an automaton factory were *completely* realized, but with the "many orders of workpeople" omitted, if the machinery had but to be set going to turn out commodities (within certain limits of course) at pleasure; would not a purely automatic place of production like this be a factory? Something nearly approaching such a result has already been achieved in certain industries—as in the most modern form of corn-milling, while even in the old-fashioned country corn mill (the true precursor of the modern factory) the whole productive apparatus is often superintended by one man—and he not infrequently locks the door and goes home to dinner leaving the machinery to do its work alone. In the still more alien department of Distribution, again, we have automatons now disposing of goods, and taking payments in return, at our street corners.

The truth is that since the term factory was wrested from its elder meaning, and that new one substituted for it which has been noted, no sufficiently rigid analysis has been applied to the system of production which then assumed its name, and to the circumstances under which it did so. It is confounded with the increased employment of machine

labour¹ (an extreme instance of which has just been cited), with mere capitalism—the industrial power vested in accumulated wealth,²—or it has been fitted to any emergency that the wants of the moment suggested. But increased employment of machinery has affected agriculture just as much as it ever affected manufacture, and the almost limitless power permitted to capital in the hire of labour is but a particular instance of the reign of open competition distinguishing modern times. Both are features of the Industrial Revolution of the last two centuries, which affected the Factory System precisely as it affected other systems of industry, and not necessarily more. Dr Uie seems to have been led into error by his nearness to these great events, and to have never really understood the organization he was nevertheless at such pains to describe. He took the Factory System for a *new thing*, the truth, of course, being very different. Such a system of labour is a quite usual phenomenon in *any* industrial community, ancient or modern, which has reached a certain stage of economic progress—the stage generally of an export trade or even of a very abounding native population—and *the institutions of which permit it*. In other countries, India for example,³ it never has prevailed, simply because native institutions would not permit it were, in fact, directed deliberately against it. Alter them, give capital and competition free scope, and—the industrial spirit continuing—we hold that it certainly would follow.⁴

¹ This is the mistake of Marx, Engels, and writers of that school, who seem incapable of distinguishing properly between machine industry and factory labour.

² See p. 16.

³ On the organization of labour in India, see *Industrial Arts of India*, by Sir George Birdwood, Part I (Chapman and Hall, 1880).

⁴ As it is in fact doing in India now, and in Japan, and elsewhere, where manufacture was once all handicraft.

The exterior features might differ for it would take upon itself the colour of surrounding things, its interior economy would certainly vary, in harmony with these, but the thing itself would be there, so long at least as combined labour can produce more cheaply and efficiently than isolated labour can, which has hitherto in human affairs been generally the case

This error vitiated many of the best intentioned arguments of the early factory reformers and was a stumbling-block in the path of the earlier Factory Acts. It produced uncertainty, and even contradiction, in dealing with the many problems presented to them, and popularized an altogether false notion of their actual sanctions and proper aim. And thus it came about that that most valuable and beneficent body of laws only approached the fulfilment of its mission by a circuitous and partial, instead of, as might have been, in a direct course, that so much still remains to be explained about them, and something even to be explained away.

PHILOSOPHY OF FACTORY LEGISLATION.—For factory legislation is not only a most important concomitant of the modern Factory System, but, regarded from its social side, is perhaps the most important concomitant of all. The interest attaching to mechanical improvements is no doubt great, and increased production of itself a highly desirable thing, yet it is doubtful, after all, if the greatest boon which the modern Factory System has conferred upon mankind resides so much in these material gains as in the revolt against the abuses connected with them which produced the Factory Acts. It is more than possible that when all those contrivances have been superseded by others—as they surely will be—those laws will remain the chief glory of

PHILOSOPHY OF FACTORY LEGISLATION 31

their time. They are likely to do so for several reasons. First, because their value is by no means limited by the conditions under which they came into being, nor indeed by any conditions that can be yet foreseen. Secondly, on account of their remarkable success in a previously untried sphere of legislation, but thirdly and chiefly, that they embody a great practical protest against the base belief, engendered of modern economic philosophy, that the concerns of human beings can ever be entrusted to motives of pure cupidity without shocking and degrading results. Against that shameful doctrine they set up a legal barrier, weak and partial at first, but gradually growing till it became a powerful instrument, which repeatedly encountered oppression in one of its most insidious forms and snatched from it its prey.

The philosophy of factory legislation is concerned with factories, nevertheless, in an almost exclusively historical category, the connexion being to a large extent casual. It may seem strange at first sight to make this assertion, and some further explanation is necessary. The great industrial establishments of antiquity, we must remember, were not *called* factories, hence the system of labour belonging to them was not called factory labour, nor the mode in which it was regulated factory regulation. But those places were, factories nevertheless¹, and any law that was enforced for their conduct amounted in effect to factory law. Now, we know that in Rome, in Egypt, and generally in old times where the labour of production was performed by slaves, there were very strict laws for their protection, as where this was not the case there were trade customs, or feudal or tribal obligations, typifying in such instances a like thing. But when the new producing

¹ See page 3.

establishments came into being and assumed the title factory, slaves were not employed, nor therefore such laws in operation, the guild organizations had died out, and the obligations of feudality become effete. All citizens were supposed free and equal, while at the same time competition was allowed its utmost range, and great accumulations of capital were being formed by individuals, and used without question in the affairs of industry. This, too, was the epoch of the great mechanical inventions. Such circumstances threw obviously immense power into the hands of wealthy and enterprising men over their less wealthy and enterprising fellow-men. They acquired the first command of those new and greatly efficient instruments of production, and could then practically (till a remedy was found) dictate terms to the less efficient human instruments. "The various processes (of manufacture) which had heretofore been chiefly performed by hand under the master's own roof, began now to be executed in public *mills*, in which, in one or more buildings, as the case happened, the operatives worked up the materials belonging to the manufacturers under the supervision of overseers appointed by the employer"¹ Neither was this movement confined, of course, to such places, it necessarily penetrated wherever labour could be employed for any productive purpose on the same footing. A description was lately quoted (p. 17) of what occurred coincidently in the cutlery manufacture, where the industry was, and still is, to a large extent domestic and manual, and the same process occurred, as is well known, in the stocking industry, the lace industry, and others, and continues doing so to our own day; it merely attained its evil notoriety first in them. The true philosophy of factory legislation becomes thus apparent, and

¹ *Conflicts of Capital and Labour*, p. 84.

its connexion in a historical category only with any particular class of places denominated at any particular time factories. Its real nature is resolved into a protest against a method of economy which subordinated immediate human interests to the blind discretion of employers filled with the most pitiless of all passions, the pursuit of gain, that passion manifesting itself in unusually atrocious forms under the novel stimulus of the Factory System.

THE FIRST REFORMERS —The new system of production had been upward of half-a-century in operation before public attention was directed to it in any considerable degree. During that time it had spread from its first home in Derby over a wide area, principally in the midland counties, where it had been mostly confined to the manufacture of metal products and silk. But towards the end of this period the great inventions for the treatment of wool and cotton fibre (referred to in the last chapter) had been coming into use, and in 1787 were likewise applied to flax.¹ Almost immediately complaints began to be heard of abuses connected with factories, especially the cotton factories of Lancashire, and in 1795 a Committee was appointed at Manchester to report upon the whole subject. Before this Committee, on the 25th January 1796, Dr Perceval, an eminent local physician, brought up the following resolutions for approval, which were subsequently adopted. "1st It appears that the children, and others who work in the large cotton factories, are peculiarly disposed to be affected by the contagion of fever, and that when the infection is received it is rapidly propagated, not only amongst those who are crowded together in the same apartments, but in the families and neighbourhoods to which they belong. 2nd. The

¹ *Modern Factory System*, p. 72

large factories are generally injurious to the constitutions of those employed in them, even when no particular diseases prevail, from the close confinement which is enjoined, from the debilitating effects of hot or impure air, and from the want of active exercises, which nature points out as essential in childhood and youth to invigorate the system, and to fit our species for the duties of mankind 3rd The untimely labour of the night, and the protracted labour of the day, with respect to children, not only tends to diminish future expectations as to the general term of life and industry by impairing the strength and destroying the vital stamina of the rising generation, but it too often gives encouragement to idleness, extravagance and profligacy of the parents, who, contrary to the order of nature, subsist by the oppression of their offspring 4th It appears that the children employed in factories are generally debarred from all opportunities of education, and from moral or religious instruction. 5th. From the excellent regulations which subsist in several cotton factories, it appears that many of these evils may, in a considerable degree, be obviated, and we are therefore warranted by experience, and are assured that we shall have the support of the liberal proprietors of these factories, in proposing an application for parliamentary aid (if other methods appear not likely to effect the purpose) to establish a general system of laws for the wise, humane, and equal government of all such works "

In the last paragraph of these justly celebrated resolutions the definite suggestion is made of a *code* of factory legislation, for the "equal government of all such works." In those words the principle of the earlier Factory Acts is stated in its simplicity and entirety. The proposal is for the amelioration of what was then assumed to be a novel evil, by means of legislative action specially adapted to that end.

It did not occur to these early reformers to inquire too curiously into the origin and area of such evils, it was enough for them that they existed in an offensive and dangerous form within the particular area in question. It is to be noted, too, that mention is made of several cotton factories wherein "excellent regulations subsist," a proof that factory reformers of the most genuine type—the spontaneous reformers who were at the same time factory masters—flourished before even the earliest suggestion of anything of this kind. In this purely local connexion then with evils assumed to be peculiar to a particular mode of dealing with a single staple of manufacture did that controversy originate, from which were to be deduced in time those wider generalizations and humaner conceptions of public duty that have done, and are doing, so much to ameliorate the modern worker's lot.

PARISH APPRENTICES—One of the worst abuses of the Factory System in its early years arose in connexion with the method of obtaining workers for the mills, especially juvenile workers. This furnished also the opportunity for a decisive step.

The first factories were water-mills, often of necessity situated in remote places—situated in fact wherever power from running water could be the most readily obtained. To these places operatives had to be brought, occasionally from great distances and at considerable expense, and that this outlay might the more readily be recouped it was usual to bind them under a system of apprenticeship to serve for a term of years. "The moral results of this practice were sometimes very shocking. Removed from the constraint of publicity, and, to a considerable extent even, of the common law, the masters often treated those helpless people with

horrible inhumanity.”¹ The system attained its maximum degree of wickedness when children were sent from distant country workhouses into the factory districts, nominally to be taught a trade, but really to be disposed of at the discretion of the employer. “Under the operation of the factory apprentice system,” writes “Alfred,”² “parish apprentices were sent without remorse or inquiry, to be *used up* as the cheapest raw material in the market”; and he thus describes the ordinary procedure. “The mill-owners communicated with the overseer of the poor, and when the demand and supply had been arranged to the satisfaction of both the contracting parties, a day was fixed for the examination of the little children, to be inspected by the mill-owner or his agent. Traffickers contracted with the overseers for removing their juvenile victims to Manchester, or other towns. On their arrival, if not previously assigned, they were deposited in dark cellars, where the merchant dealing in them brought his customers”—and where—“the mill-owners, by the light of lanterns being able to examine the children, their limbs and stature having undergone the necessary scrutiny, the bargain was struck, and these poor innocents were conveyed to the mills.” What followed is related by another writer. “The custom,” says Mr Fielden (*Curse of the Factory System*, p. 10), “was for the master to clothe his apprentices and to feed and lodge them in an apprentice house near the factory; overseers were appointed to see to the works, whose interest it was to work the children to the utmost, because their pay was in proportion to the quantity of work they could extract. Cruelty was, of course, the consequence; and there is abundance of evidence on record, and preserved in the

¹ *The Modern Factory System*, p. 87

² *History of the Factory Movement*, by “Alfred,” vol. 1, chap. 11.

recollections of some who still live, to show that in many of the manufacturing districts, but particularly, I am afraid, in the guilty county (Lancashire) to which I belong, cruelties the most heart-rending were practised upon the unoffending and friendless creatures who were thus consigned to the charge of master manufacturers, that they were harassed to the brink of death by excess of labour, that they were flogged, fettered and tortured in the most exquisite refinement of cruelty, that they were in many cases starved to the bone while flogged to their work, and that even in some instances they were driven to commit suicide to evade the cruelties of a world in which, though born to it so recently, their happiest moments had been passed in the garb and coercion of a workhouse." A most shocking revelation of this condition of things, written from personal experience, is contained in the well-authenticated narrative of Robert Blincoe, who was sent at the age of seven years from the St Pancras workhouse to serve at a cotton mill near Nottingham, whence he was transferred to others afterwards. The statements in this record are simply *appalling*, and would be absolutely incredible were they not fully borne out by evidence from other sources. We will not burden these pages with them,¹ substituting instead some particulars from one of those cotton factories wherein "excellent regulations prevailed," from what was, indeed, by pretty general consent reckoned the model factory of the time. This was the establishment at New Lanark in Scotland owned by Mr David Dale, and the subject of a high encomium in the *Annual Register* for 1792. "Already in 1784," writes Mr R. D. Owen (*Threading my Way*, p. 13 *et sub*), "the population of New Lanark was upwards of 1700, of whom several

¹ They are given in some detail in *Modern Factory System*, pp. 189, 198.

hundreds were orphan children, it was, I believe, the largest cotton-spinning establishment at that time in Great Britain, employing about a thousand workpeople” Just at the end of the century it passed into the hands of the celebrated Robert Owen, who gives some details of what he found there¹ There were about five hundred children employed at that time, who “were received as early as six years old, the pauper authorities declining to send them at any later age” “It was found, or thought, necessary that these little creatures should work with the other people *from six in the morning till seven in the evening*, and it was only after this task was over that instruction began The inevitable results followed The poor children hated their slavery, many absconded some were stunted and even dwarfed in stature, at thirteen or fifteen years old, when their apprenticeship expired, they commonly went off to Glasgow and Edinburgh, with no natural guardians, ignorant of the world beyond their village, and altogether admirably trained for swelling the mass of vice and misery in the towns.” “The condition of the families who had immigrated to the village was also very lamentable The people lived almost without control, in habits of vice, idleness, poverty, debt and destitution. Thieving was general. Yet (says Owen) the workpeople were systematically opposed to every change which I proposed, and did whatever they could to frustrate my object” If such was the condition of things in a model factory and under the best of masters one may imagine what it must have been under others less scrupulous

¹ The above statements are taken at second-hand from Mr W. L. Sargant's book, *Robert Owen and his Social Philosophy* (Smith and Elder, 1860), but Mr Sargant explains in a note to p 32 that they are in turn copied verbatim from Owen's *Autobiography*, I xxvi. 57, 61, 62, 276.

THE FACTORY AGITATION ROBERT PEEL AND ROBERT OWEN —To the honour of his class it was a master manufacturer, the first Sir Robert Peel, who earliest brought this matter effectively under the notice of Parliament. The measure of relief that he proposed was a small one, as we shall see more fully hereafter, but it was a step in progress, and it definitely inaugurated the factory controversy in the legislature. In the meanwhile a popular agitation had been set in motion also, having its origin in those five resolutions passed at Manchester (p 33), and been gradually spreading, and increasing in volume as it spread, till it too became a powerful motive force. Among names which come earliest before us in connexion with it is that of Robert Owen, who, having devoted himself with unremitting ardour to the reform of abuses at his own works, commenced about the year 1812 the agitation of factory reform upon a large scale outside them. In 1813 he addressed a public letter to owners and managers, in which he broached his views, and in 1815 undertook, in concert with his son, Mr R D Owen, a journey through England and Scotland for the purpose of collecting full evidence as to the position of affairs. "The facts we collected," writes the latter gentleman, "seemed to me terrible almost beyond belief . . . In some large factories from one-fourth to one-fifth of the children were cripples or otherwise deformed, or permanently injured by excessive toil, sometimes by brutal abuse. The younger children seldom lasted out more than three or four years without severe illness, often ending in death" (*Threading my Way*). Owen laid these facts before several influential members of Parliament with whom he had interviews about this time. He even prepared a remedial Bill of

his own, an excellent and comprehensive measure¹ which would have ante-dated future factory legislation by at least a quarter of a century had it been adopted. Unfortunately it was far in advance of the opinion of those days and the opportunity was lost. He next sought to enter Parliament himself, and failed, after which his name gradually disappears from the Factory Controversy, to be succeeded by those of other workers in the same good cause, to whom a few words of notice are due.

RICHARD OASTLER — There had by this time been formed at Manchester a small committee of friends of factory reform to watch the action of such poor and partial legislation as had now been obtained, the first of those "Short Time Committees" of which a good deal was heard afterwards. The members originally composing it were John Doherty, James Turner, Thomas Daniel and Philip Grant. Unfortunately their efforts up to about 1829-1830 had not been very successful, they were disheartened, and had almost broken down for want of support. "At this critical moment," writes one of them,² "the attention of some humane men in Yorkshire was attracted to the subject. Mr John Wood, of Bradford, had for some time been endeavouring by his own private influence to bring about a better system in the woollen mills of the West Riding, but, alas, the avarice of mankind, and the desire to accumulate wealth were too great to be subdued by that great and good man." He determined, therefore, to make a more public protest, and take more decided action, and

¹ The full text of the Bill is to be found in *A Supplementary Appendix to the first volume of The Life of Robert Owen, Written by Himself*, p. 21 (Effingham Wilson, 1858).

² *History of Factory Legislation*, by Philip Grant (Manchester, 1866)

began to look about for someone with energy and ability to aid him in this enterprise " He laid his case before a philanthropic friend, Mr Richard Oastler, of Fixby Hall, Huddersfield, agent for the property of Thomas Thornhill, Esq , a large Yorkshire landowner Mr Wood was a wealthy worsted manufacturer, and well acquainted with the ins and outs of the factory question " He knew Oastler to be a brilliant controversialist, for he had more than once taken a stirring part in Yorkshire politics, on the Tory side He knew him to be a friend of liberty, for he was an eager emancipationist, at a time, too, when to be a follower of Wilberforce meant to be in strong opposition to most men of his own set and party To him he went then " ¹ The rest of the story is well known Oastler threw himself with all the energy of a fervid and noble nature into the cause of the factory children, nor ever ceased advocating it till victory crowned his efforts and that cause was won Misfortune came to him afterwards, and he withdrew somewhat from the arena of conflict, but the good work had been initiated, and it failed not subsequently for other friends.

LORD ASHLEY.—With the appearance of Oastler as a prominent figure in the factory controversy, a new epoch in it may be said, to have commenced Hitherto the agitation had been mostly confined to Lancashire, and concerned about cotton mills henceforth for a while its principal seat was Yorkshire, and worsted and woollen factories constituted the places most under debate On 22nd November 1830 at a representative meeting of Yorkshire manufacturers held at Bradford just cause of complaint was acknowledged to exist , and on 24th April 1832, a memorable

¹ *Modern Factory System*, p 212.

meeting was held at York,¹ which exercised a strong influence on public opinion. In the meanwhile a Society, "The Metropolitan Society for the Improvement of Factory Children," had been formed in London, of which Mr William Allen, a distinguished member of the Society of Friends, was president, and the Duke of Sussex, one of the King's brothers, a member—and other members in other parts of the country, Mr Michael Thomas Sadler had taken up the cause with vigour in the House of Commons (in succession to Sir J C Hobhouse), and the Rev. G S Bull, a clergyman of the Church of England, and the Rev J R. Stephens, a dissenting minister, were powerful auxiliaries outside. Unluckily, in the general election of 1832, Sadler lost his seat in Parliament, and died not long afterwards (1835), to the lasting loss of the cause of factory reform. A notable piece of good fortune then befell it, just when it seemed to need it most. The political leadership of the movement, thus vacant, was offered to Lord Ashley, already known to fame as a young man of high promise and exceptionally noble character, and after a short hesitation on his part was eventually accepted. The precise details of this most interesting transaction are told best in his own words, transcribed from a personal memorandum found among his papers many years afterwards. They are quoted in Mr Hodder's *Life of Lord Shaftesbury* (vol. 1, p 148). "In the autumn and winter of 1832," it runs, "I read incidentally in *The Times* some extracts from the evidence taken before Mr Sadler's Committee. I had heard nothing of the question previously, nor was I even aware that an inquiry had been instituted by the House of Commons. Either the question had made very little stir, or I had been

¹ A very interesting account of this meeting, and what ensued on it, is given by "Alfred," vol. 1, chap. x.

unusually negligent in Parliamentary business . I was astonished and disgusted , and knowing Sadler to be out of Parliament (for he had been defeated at Leeds) I wrote to him to offer my services in presenting petitions, or doing any other small work that the cause might require I received no answer, and forgot the subject. The Houses met in the month of February, and on the second or third day I was addressed by the Rev G S Bull, whom till then I had never seen or heard of . He was brought to me by Sir Andrew Agnew, and they both proposed to me to take up the question that Sadler had necessarily dropped . I can perfectly recollect my astonishment, and doubt, and terror, at the proposition . I forget the arguments for and against my intermeddling in the affair , so far, I recollect, that in vain I demanded time for consideration , it was necessary, Bull replied, to make an instant resolution, as Morpeth would otherwise give notice of a Bill, which would defraud the operatives of their ten hours' measure by proposing one which would inflict eleven " The respite of a single day was allowed , and Lord Ashley took the course thereafter which will long shed lustre on his name

OTHER LEADERS.—This happy solution of the problem of leadership occurred just after the election of the first reformed Parliament, the names of at least four other members of which are also deserving of special mention in connexion with the factory controversy . They are William Cobbett, Joseph Brotherton, Charles Hindley, and John Fielden. Two still more eminent ones, prominent on the same side at first, were afterwards transferred to the other, namely Daniel O'Connell and Sir Robert Peel. Under such auspices as these then, and with a growing feeling in its favour throughout the country,

that controversy, waxing ever warmer, was presently lifted to an altogether higher level, and given a new scope and significance

PROGRESS OF THE CONTROVERSY — It was a subject of constant complaint, nevertheless, both among the more thoughtful supporters and opposers of factory legislation, that the arguments used commonly in favour of reform were so partial and illogical, covering but a small space of the whole wide field of industrial employment, or debating the question at issue on insufficient grounds. Very early in its course this defect was made powerful use of by the opponents of interference in a pamphlet, published in 1818,¹ criticizing the Report of the first Committee of Inquiry, which had now been appointed, at the instance of Sir Robert Peel. It was pointed out in this pamphlet how that the conditions of labour in other factories, as, for instance, linen and woollen mills (which, nevertheless, would not be touched by the legislation then proposed), were as bad as, or worse than, in cotton factories (pp 16, 17), and the same argument remained a valid one, with a still wider application, when all textile works were ultimately brought under supervision. It began to be asked; sometimes with bitter sarcasm, why only these places? How it was that factory children alone were deserving of protection by the State² — whilst other children, employed in

¹ *An Inquiry into the Principle and Tendency of the Bill now pending in Parliament for imposing certain Restrictions on Cotton Factory* (London, 1818)

² Thus on 25th February 1819, Lord Chancellor Eldon stated in the House of Lords that "the offence of overworking children was one indictable at Common Law." He "saw no reason why the master cotton-spinners, manufacturers, and master chimney sweepers should have different principles applied to them than were applied to other trades."

places not so called, yet subject to like influences, were neglected? Why mines and collieries, where shocking barbarities were said to prevail, were exempt, and, at length, on what plea of justice agriculture, the poorest of all occupations, was entirely left out? It is known now how keenly Lord Ashley resented some of these sarcasms¹, which in the case of agricultural labour were often aimed directly against himself, his lordship's family being large landowners in a poor agricultural district, and he himself sitting for an agricultural borough (Dorchester) Stung to further action by them, and ever ready to undertake good work, he submitted on 4th August 1840 a resolution to the House of Commons, one of the most important ever submitted to that tribunal in its long and useful history. He moved "That an humble address be presented to her Majesty, praying that her Majesty will be graciously pleased to direct an inquiry to be made into the employment of the children of the poorer classes in mines and collieries, and in the various branches of trade and manufacture in which numbers of children work together, not being included in the provisions of the Acts for regulating the employment of children and young persons in mills and factories" In introducing this resolution his lordship made use of the following words—"I have long been taunted with narrow and exclusive attention to the children in the factories alone; I have been told in language and writing, that there were other cases fully as grievous, and not less numerous; that I was unjust and inconsiderate in my denouncements of the one, and my omission of the other I have, however, long contemplated this effort which I am now making, I had long resolved that, so soon

¹*Life of Lord Shaftesbury*, vol. 1, p. 519 Compare Miss Martineau's *History of the Peace*, vol. iv., pp. 206, 208

as I could see the factory children, as it were, safe in harbour I would undertake a new task "

Such was the origin of the first great commission of inquiry into the industries of the country as affected by changed methods of labour, commonly called the "First Children's Employment Commission," from the date of which it was clear that the old basis of factory legislation was shifting, and previous notions of its scope and mission could no longer be considered adequate

The Commission issued two Reports, the first dealing exclusively with mines, the second with other trades and manufactures. That concerned about mining was acted upon at once, but much further agitation had to occur, and yet another Commission to investigate and report before anything comprehensive was done respecting the other subjects of the inquiry. Of the details then brought to light we shall have something to say hereafter, for the present our concern is with the earlier Report and its influence on legislation and the Factory Controversy. The second part of this (Part II. *Trades and Manufactures*, Parl Pap., 1843, XIII.) presented a series of recommendations of the most exhaustive kind, dealing not only with occupations in which machinery was used, but with many manual ones as well, not merely with industries of the congregated class, but with many forms of isolated labour, and domestic manufacture. It was proved that in nearly all of these, abuses existed in no wise less, in some cases even greater, than what had been proved against factories—that is against textile factories as then defined by law. What was to be done? Exponents and opponents of legislation had alike (with few exceptions) no doubt upon the matter. Those industries must be legislated for too. So argued opponents, that every branch of the new system of pro-

duction might be subject to a like supervision, and none be more "free" than another, so argued its exponents on the ever-broadening ground that circumstances had compelled them to occupy in their constant endeavours to ameliorate the conditions of modern labour. What matter if such places were not really factories, they might easily be called so, or might not the same, or similar laws be extended to them in any case, by whatsoever name they were called? Nay, *must* they not after such disclosures? Not only sentiment now, but sound reason, seemed on the innovator's side, having gone so far they must to be consistent go farther or go back of what had been already done.

With this general consensus of public opinion in favour of legislation the Factory Controversy, as originally understood, comes properly to a close. It was no longer a question of kind that the reformers of the next quarter of a century had to deal with but of degree. It is scarcely a question either of kind or degree that reformers are concerned with now, but of application, of administration and of the ultimate limit of State interference—in the last resort—with all material labour.

SUMMARY.—The story of the Factory System has thus been traced, from the first application of the word "factory" in its modern sense to a time when a later signification of it had become nearly obsolete too. We have found this term neither fixed by law nor usage in any invariable meaning, but to have had, on the contrary, an extremely variable one, and to have been the occasion of much varied legislation accordingly. This variability it has communicated to the expression Factory System: a mode of labour into which the industrial revolution of modern times has introduced great changes. The Factory Acts are in this

view the necessary counterpoise that seeks to restore equilibrium between the new ethical and economical ideals. On the historical point, we have quoted evidence of the existence of factory systems in very ancient times, and, in particular, under the great ancient civilizations of Rome and Egypt, in connexion with which matter the statement has been hazarded that it is a method of industry ever likely to present itself when existing economic circumstances are favourable. On the subject of the development of factory legislation, it has been shown that supervision was applied in the beginning only to very special industries, but afterwards more generally, and in this development the *tile* factory has remained while almost nothing else has done so, till at length an epoch has been reached when Factory Acts are called upon to deal with many kinds of labour and forms of industry other than are popularly associated with this name. The process of this development is that of which we have next to treat. To it the next three chapters will be given, the last being concerned with occupations still unincorporated, or incorporated only in part, together with such other matter as may seem proper then. In this way, it is hoped, the whole field of investigation will best be covered, and some definite and precise conceptions be conveyed. We have to relate how a new edifice for freedom's sake, though not at first in freedom's name, was raised upon the ruins of older systems of labour regulation as a refuge from cupidity and tyranny, and to take the place of older barriers which "the wisdom of our ancestors" had provided. And once again, as ever heretofore, the cement to hold its parts in place was *law*. Let it ever be remembered, and the present is a notable illustration of the truth; that there is no liberty without law. Anarchy there may be, the rule of the strongest,

cruellest, cleverest —freedom never ! It is quite possible—it is even probable—that the political slavery of ancient times was no whit more heavy than the economic slavery under which English labour groaned previous to the enactment of the Factory Acts. From that slavery, by a long course of constitutional agitation, it has been gradually emancipated up to the point that it has reached to-day, and the process is not over. Be it so. So long as the friends of progress arm themselves only with the same weapon as heretofore there is little cause to fear what further developments are in store, but there is good reason to distrust hasty and ill-considered courses, which have seldom in the history of mankind been successful in the end.

CHAPTER III

THE FACTORY ACTS

(1802 TO 1833)

PREVIOUS LEGISLATIVE ENACTMENTS—THE FIRST FACTORY ACT—FIRST PARLIAMENTARY INQUIRY—RESULTING LEGISLATION—THE FACTORY ACT, 1831—SADLER'S COMMITTEE—THE FACTORY ACT, 1833

PREVIOUS LEGISLATIVE ENACTMENTS—Not until a very recent time in the history of mankind did the belief prevail that the relations of men to one another in respect to industrial production should be less a matter for exterior regulation than in regard to any other subject of contract. On the contrary, this had been always held to be one of the first and most obvious relations requiring careful public supervision. In the great slave-holding countries of history, for example, from ancient Egypt and Assyria to Great Britain in the last, and America in the present century, that obligation had been duly recognized, and in those where slavery did not prevail, the still stronger and more permanent compulsions of custom, tradition, caste or voluntary association, had usually supplied the place of law.¹ In mediæval Europe the form this supervision commonly took was that of guilds or trade societies, which supplied the necessary machinery and undertook the task

¹ See page 36.

of government But in England the guilds were abolished (after being plundered) by Henry VIII, and thenceforward for a while no adequate supervision of labour was provided The executive authority intermittently, and the local authority (in the persons mostly of magistrates at Quarter Sessions) subsequently stepped in for a while, but their intervention was partial and ineffectual

It was under these circumstances—combined with others heretofore described¹—that factory legislation became a necessity of existence among a free and self-respecting people But for some such protection the battles of civil and religious liberty, that had made the course of English history glorious through many preceding centuries, had been fought in vain so far as a considerable and most respectable portion of the population was concerned, a grinding economic despotism had grown up notwithstanding, and eaten its way into the heart of industry To put a stop to this gross evil and injustice was—and is—the bounden duty of Government in any civilized community There is, and can be, no more important and immediate one.

The Factory Acts were not, however, as has been said, the first attempt at State regulation of labour in this country They were, indeed, far otherwise From about the middle of the fourteenth to about the middle of the eighteenth century the statute-book is crowded with enactments having reference to this subject, the most important of them (for our purpose) being the series known as the “Statutes of Labourers,” which had their rise in the reign of Edward III. (1349), and were often renewed, amended and re-enacted afterwards. But all of these were distinguished by a common purpose which is the exact opposite of the purpose of factory legislation; they belong to an era, and breathe

¹ *Ante*, chap. i.

the spirit of an epoch antecedent to the Industrial Revolution. Whilst it is the constant purpose of Factory Acts to shorten the working day, a common object of those laws was to lengthen it, or, as Mr Jevons puts it, they dealt with the question of hours of work "not by way of limitation, but by imposition"¹ They were, in fact, Acts passed in the masters' interests, not the men's. Thus, the first of them provided, that "from the middle of the month of March to the middle of September, all artificers and labourers hired by time were to be and continue at their work at or before five o'clock in the morning, and continue at work and not depart betwixt seven and eight of the clock at night"—three hours being allowed for meals—namely one hour for breakfast, one and a half for dinner and half-an-hour for "noon-meate". In winter the work-time was to be from five in the morning until dark, with the same intervals. A subsequent one (Statute of Apprentices, 1562) curtailed the above intervals by more than half-an-hour—dinner was to last one hour, and the "afternoon sleep of half-an-hour" to be permissible "only between the middle of May and the middle of August". . . so that (Mr Jevons continues) "the legal day's work was to be twelve hours *at the least*"—and the same spirit characterized them to the end. Another particular in which they differed from modern factory legislation was in the attempt to fix the rate of wages in a great variety of occupations. The proposal was to find a "reasonable wage"—a desirable enterprise if it were only feasible, and one not without earnest and able advocates at the present day. But it was never, and could never be, more than partially operative under the circumstances, and its constant evasion cast an air of unreality over the whole system. Further, these

¹ *The State in Relation to Labour*, p. 35 (Macmillan, 1882)

laws were enforced or not as the masters (who were their authors) pleased, but seldom or never at the discretion of the workers, and finally, to make "confusion worse confounded" did not in many cases apply at all. The Statute of Apprentices, for instance, was limited in operation to towns corporate, and industries already in existence, so that new ones springing up elsewhere, or afterwards, were left to shift for themselves, under the fostering care of the competitive principle and in full view of the other protected ones. The great cotton industry, among others, came thus into being, and many of the early arguments for factory legislation were based on that circumstance. Some of these have been partially discussed already (p. 32), and will be occasionally alluded to again, others may emerge hereafter. We proceed now to describe the very remarkable body of law which ensued on the disruption of this old industrial order, and with special relation at first to that fibre of manufacture¹

THE FIRST FACTORY ACT—The first Factory Act ever passed by the British Parliament was called "The Factory Health and Morals Act, 1802" (42 George III, c. 73), and applied principally, though not exclusively, to apprentices in cotton and woollen mills. The preamble runs as follows.—

"Whereas it hath of late become a practice in cotton and woollen mills, and in cotton and woollen factories, to employ a great number of male and female apprentices, and other persons, in the same building, in consequence of which certain regulations are become necessary to preserve the

¹ This part of the subject is very efficiently dealt with in another volume of the present series, *Trade Unionism New and Old*, by G. Howell, M.P.

health and morals of such apprentices be it therefore enacted . that from and after the 2nd day of December 1802, all such mills and factories within Great Britain and Ireland, wherein three or more apprentices, or twenty or more other persons, shall at any time be employed shall be subject to the several rules and regulations contained in this Act ”

These regulations, briefly stated, were the following —

1st. The first section enjoins the “ master or mistress ” of the factory to observe the law 2nd All rooms in a factory are to be lime-washed twice a year and duly ventilated (sec. 11). 3rd. Every apprentice is to be supplied with two complete suits of clothing—one new suit every year—with suitable linen, stockings, hats and shoes (sec 111) 4th The hours of work of apprentices are not to exceed twelve a day, nor commence before six in the morning, nor conclude before nine at night (sec iv.). 5th They are to be instructed every working day during the first four years of apprenticeship in reading, writing and arithmetic “ by some discreet and proper person,” the time so occupied to be counted out of their hours of work (sec vi.) 6th. Male and female apprentices are to be provided with separate sleeping apartments, and not more than two to sleep in one bed (sec vii). 7th On Sunday they are to be instructed in the principles of the Christian religion , they are to comply with various religious ordinances during their apprenticeship, and to go to church once a month at least (sec viii.) 8th. Two visitors are to be appointed by the adjacent Justices of the Peace, one of whom must be himself a Justice and the other a member either of the Church of England or of the Church of Scotland, to enforce the provisions of the Act (sec. ix) 9th In case of infectious disorders prevailing, these visitors may require the employer

to call in medical assistance (sec. x) 10th Copies of the regulations of the Act are to be affixed in conspicuous places (sec. xi) 11th A list of the factories situated in his district is to be kept by every Clerk of the Peace (sec. xiv.) Penalties are enacted for breaches of the law (secs. xi to xiii), and the method of recovering them (secs. xv, xvi) is provided for "

This is a very interesting statute to students of factory legislation from several points of view. The primitive character of some of the clauses "show that the new industrial system had not yet emerged from that transitional phase when mills were built in unfrequented places, and it was necessary to provide for their working by lodging apprenticed workers sent from a distance," and one readily infers from it what were the chief industries of which complaint was at that time made. Its application was to cotton and woollen factories, therefore cotton and woollen factories were the establishments considered especially faulty. It imposed, we note, no limit of age on workers, nor required any proof of their fitness for employment. The provisions about clothing, medical attendance and religious teaching are strange to modern notions. "They clearly point to a time when the relations between employer and employed were closer and more intimate than they have since become, when something of paternal interest and authority lingered about the former, and the link that united these partners in production was not a purely mercenary one."¹ It was an important statute, "as being the first definitely in restraint of modern factory labour and in general opposition to the *laissez faire* policy in industry"; a genuine attempt, it would seem, to supply in some sort the place which the guilds had held formerly

¹ *Modern Factory System*, p. 282.

in trade organization. It must be particularly observed, however, that its special application was to apprenticed, not free labour, free that is of *civil* compulsion, and that non-apprenticed children might still be taken into employment as formerly. In practice it proved inoperative. The duty cast on factory visitors was an invidious one, for which no recompense was provided, and they generally failed to carry it out. Changed circumstances of industry, too, soon rendered it obsolete, and though remaining for a long time actually unrepealed ¹ it was soon superseded by others.

FIRST PARLIAMENTARY INQUIRY.—The changed circumstances alluded to were principally the result of the new motive power which now began to be applied to production on a large scale. Hitherto factories of the modern type had been built in water-abounding districts, and often in remote localities, but the introduction of steam-power transferred them to populous places instead, whither coal could be carried more easily, and where an unfailing supply of labour might generally be obtained. One result of this was that children brought into such factories did not need to be apprenticed, and worked there accordingly without participating in the benefits of the first Factory Act. Sir Robert Peel brought this matter under the notice of the House of Commons on 6th June 1815, proposing an amended measure which should apply to apprenticed and non-apprenticed children alike. "A bad practice had prevailed," he said, "of condemning children whose years and strength did not admit of it to the drudgery of occupations often severe, and sometimes unhealthy. What he was disposed to recom-

¹ It was not formally repealed till 1878, 41 Vic., c. 16, sec. 107 and Sch. VI.

mend was, that no children should be so employed under the age of ten years, either as apprentices or otherwise, and the duration of their labour should be limited to twelve hours and a half per diem, including the time for education and meals, which would leave ten hours for laborious employment" ¹ This proposal met with little opposition and the Bill was brought in and read a first time

Up to this stage factory legislation had excited but little general interest and absolutely no alarm. Nothing had been said about the necessity of any public inquiry into the matter, a device destined to play a great part thereafter in its development, nor had Sir Robert Peel confined his attention to the case of children employed in only cotton mills. Nevertheless, he is found the next year limiting the scope of his endeavours in just those two directions, and inaugurating a new policy of a distinctly retrograde kind. What had occurred meanwhile? The answer is supplied by "Alfred" (*History of the Factory Movement*, vol i, p 44), and is valuable not alone as an index to the character of this distinguished man, but for the light it sheds on subsequent events. "He was ever anxious," writes "Alfred," ² "to conciliate his opponents, a desire very creditable to his heart, but in the then existing state of parties by no means favourable to the speedy success of the measure of which he was the exponent. . . . He was conscious of the justness and practical utility of the cause he advocated, and, like many other men of good intentions, gave to opponents credit for openness of conviction and conscientious candour not always well placed," . . . and,

¹ *Hansard*, First Series, vol. xxxi., p. 624.

² It is, I believe, no longer a secret that the real name of the author so long concealed under the above *non de plume* is Mr Samuel Kydd, Barrister-at-Law.

in fine, "to the anxiety of the first Sir Robert Peel to conciliate opposition, then comparatively powerless in numbers and influence, may be attributed"—this well-informed writer thinks—"the protracted struggle for factory legislation that ensued."

On the 3rd April 1816, he came forward, accordingly, with his new proposal, the appointment of a Committee of Inquiry, "to take into consideration the state of the children employed in the different manufactories of the United Kingdom, and to report the same, together with their observations thereupon, to the House" it being generally understood that the Inquiry should be practically confined to cotton mills. He was again successful. But the committee thus originated was foredoomed to failure from the first. "The disagreement of the witnesses examined was distinct and irreconcilable . . . men of the highest respectability gave evidence on the same subject leading to opposite conclusions."¹ The fact was, that a great many of those whose testimony was taken did not believe in the practicability of any such legislation, whilst others did not believe in its utility, and many more allowed their judgments to be coloured by their supposed interests. The proposals were at this stage novel, absurdly limited in scope, and opposed to current economic belief, and any arguments at all seemed fair under such circumstances to use against them. It was generally felt that this committee had been appointed in vain, or, if it had proved anything, had proved only a divergence of opinion wider and more fundamental than had been before suspected.

RESULTING LEGISLATION.—Nevertheless, contradictory as its conclusions were, the inquiry was not quite unfruitful.

¹ "Alfred," vol. 1., p. 59.

Those conclusions afforded material for further argument and investigation, and from about this time it is possible to distinguish two well-defined parties in the Factory Controversy, which did not exist before, the one strongly urging, the other as resolutely opposing, special legislation. Early in 1818 both were active in Parliament. On 18th February, Lord Stanley presented a petition from Manchester, condemning the evidence given before the committee of 1816, and praying "that if the House required further information upon the subject it would be pleased to appoint a Special Commission of its own members for the purpose of examining on the spot into the actual condition of persons employed in the various cotton and other manufactures." This was a reasonable, and, as the terms implied, a comprehensive proposal, but on the following day the first Sir Robert Peel brought the same subject forward from his narrower point of view. "In Manchester alone," he said, "about twenty thousand persons were employed in the cotton manufacture, and in the whole of England about three times that number. . It was notorious that children of a very tender age were dragged from their beds some hours before daylight, and confined in the factories no less than fifteen hours, and it was also notoriously the opinion of the Faculty that no children of eight or nine years of age could bear that degree of hardship with impunity to their health and constitution. Those who were employers of the children, seeing them from day to day, were not so sensible of the injury that they sustained from this practice as strangers, who were strongly impressed by it. In fact, they were prevented from growing to their full size. In consequence, Manchester, which used to furnish numerous recruits to the army, was now wholly unproductive in that respect." He concluded

by moving " that leave be given to bring in a Bill to amend and extend an Act made in the forty-second year of his present majesty's reign, for the preservation of the health and morals of apprentices and others employed in cotton and other mills, and cotton and other factories "

The measure thus heralded was brought in and read a first time, and the second reading taken almost immediately. On this occasion Sir Robert Peel gave the following explanation of the changes that he proposed " In the Bill brought in in 1815, the age at which children might be employed was fixed at ten. He now proposed the age of nine years, and that the powers of the Act should terminate when the child reached the age of sixteen and could be considered a free agent. He, therefore, recommended that children employed in cotton factories should from nine to sixteen be under the protection of Parliament, and before nine years of age should not be admitted , that they should be employed in working eleven hours, which, with one hour and a half for meals, made on the whole twelve hours and a half " The Bill was read a second time, and ultimately passed the Commons. On 7th May it was formally brought before the House of Lords, was read a second time on the 8th, and on 5th June both sides in the debate agreed to postpone further consideration for that session. In the next one, a new committee (not a Special Commission as had been asked for) was appointed to take further evidence.

This second committee need not detain us long. It resembled in its main features that of 1816, but enough evidence was tendered to it on the side of reformers to make further action in regard to cotton mills a necessity and in 1819 a new law was passed to that end. It enacted that after 1st January 1820 no child should be employed

in cotton-spinning under nine years of age , and no persons under sixteen years for more than twelve hours a day, with one hour and a half out for meals Time lost by the scarcity or excess of water was to be made up at the rate of not more than one hour extra work per day , ceilings and interior walls of cotton factories were to be lime-washed twice a year , an abstract of the Act to be hung up in a conspicuous place , and the Act itself was " to be deemed and taken to be a public Act," and " be judicially taken notice of as such by all judges, justices and others, without specially pleading the same "

Though retrograde in respect to the Act of 1802, this statute (entitled " The Factories Regulation Act " ¹) embodied (within its limitation to cotton mills) some important principles, and foreshadowed the lines upon which further legislation was to proceed Where the law was faithfully observed a considerable improvement in the condition of the operatives was perceptible, but unhappily it was more generally ignored or evaded. The permission to recover lost time in particular was found to give facility to such evasions ; and the absence of any satisfactory provisions for inspections left the law altogether inoperative in many places

It was unfortunately the tendency of the next one (60 Geo III., c 5) to exaggerate rather than minimize these defects. The principal provisions of this statute (which was passed mainly at the instance of employers) " conceded to the owners of such cotton mills as had been destroyed by fire, or damaged by some casualty (providing they were in possession of other factories in active operation at the time), the privilege of employing in the latter the hands thrown out of work in consequence of the

¹ 59 Geo III., c. 66.

accident"—and of appointing the meal-times at any period of the day that might best suit their convenience. So the matter rested for a period of about six years. Factory legislation presents at this epoch the appearance of a body of almost worthless laws, openly violated in a great majority of instances, and so ill-conceived and partial in operation as to almost invite the contempt of that very small section of employers who were even nominally subject to them.

In 1825 Sir John Cam Hobhouse carried a fresh measure (6 Geo IV, c 63) designed to remedy some of these evils, but too weak in its machinery to do so effectually, supplemented by others (10 Geo. IV, c 51 and 10 Geo IV., c. 63), still with the same end in view. It is unnecessary to enter into detail concerning any of them, for they were all soon repealed, and none did more than touch the fringe the real great issue, still involved in deep obscurity and of concealed by insufficient knowledge and slowly perishing ideals. The first was remarkable, however, for containing a provision to shorten work on Saturday, a privilege incorporated into all subsequent ones, and which has since become an integral part of the industrial life of the nation.

THE FACTORY ACT OF 1831—In the meanwhile that series of events had been occurring in the country briefly described in Chapter II. A number of just and able men had taken the cause of factory reform to heart, and were agitating it with unparalleled power and perseverance. Many things had conspired to cast discredit on the law as it then stood and to favour their designs. Its ridiculous limitation to one textile staple (cotton), the notorious disregard to its provision even in that single manufacture, the evidence that had been taken both for and against interference; and not less the evidence against than for; all

these had largely contributed to instruct the public mind. In 1831, Sir J. C. Hobhouse introduced a new Bill, to apply to the whole textile trade, reducing the hours of labour to eleven and a half a day, but it was fiercely opposed and ultimately defeated. An Act was passed instead (1 & 2 Will IV., c. 39) which, once more, and for the last time, applied exclusively to cotton factories. The provisions of this Act showed again both progress and retrogression. It commenced by repealing the four preceding ones, it prohibited night work to all persons between nine and twenty-one years of age, fixing the time of labour for persons under eighteen at twelve hours per day and nine on Saturday, *i. e.* sixty-nine hours per week, but on the other hand the recovery of lost time was facilitated, and night work permitted to persons from sixteen years upwards. Owners of cotton mills, and their immediate relatives, were disqualified from adjudicating on factory cases. This was virtually—remarks Von Plener¹—“the first Factory Act, which was, at least, to some extent, carried out, and which gave rise to still further agitation.” . . . Yet . . . “despite the law, most factories worked thirteen hours; and numerous cases of infringement were subsequently brought to light. Out of several (workers) of the legally determined age one only was dismissed the factory after twelve hours’ work, the remainder having to do overtime. In many cases”—he adds—“the men were compelled to subscribe to a fund out of which the manufacturer paid the fines incurred by him for breaking the law, which seems to have been better observed in Scotland than in England, and in the latter kingdom more so in town than country.” It was clear that matters could not rest permanently here; and certain extrinsic influences contri-

¹ *English Factory Legislation*, p. 7.

buted at this point to give factory agitation an unexpected and most powerful impulse, which presently thrust it to the very forefront of political questions and started it on a career of assured success

This unlooked-for assistance came to it from the peculiar position of party politics at the time. A section of the democracy was calling loudly for the reform of Parliament, and the Whig party had generally thrown in their lot with it. Against this combination the Tories mustered all their strength. It was an effective stroke of policy to play off factory reform against parliamentary reform, the more so as factory masters were at this time generally on the democratic or popular side. Encouraged by so favourable a conjuncture of affairs the operatives became more ambitious in their demands. They declared that nothing less than a "Ten Hours Bill" would satisfy them now, and under the brilliant leadership of Mr M. T. Sadler, who had lately entered the House of Commons, and somewhat to the dismay of their former champions there, no less than this was the proposal with which they now confronted an alarmed and bewildered legislature. On the 16th March 1832 accordingly Sadler did actually introduce such a Bill: in a speech of remarkable ability, power and comprehensive eloquence. It was met, of course, with the strongest opposition; even sincere friends of factory reform regarding it in many instances with unconcealed aversion. The most he could effect was to have the whole subject remitted once again to the consideration of a Special Committee, but one over which he was himself invited to preside.

The appointment of this celebrated committee marks a distinct turning point in the history of the factory question. By means of the evidence produced before it the public was more generally enlightened as to the true position of

things than it had yet had any opportunity of being, and even the legislature gained over to something like a proper appreciation of the task that lay before it. Unfortunately, just at the very crisis of the opportunity, Sadler lost his seat in Parliament, and was not again returned, but his place was quickly supplied by Lord Ashley. Under the leadership of that nobleman the contest was maintained with renewed vigour, and with results that will occupy our attention soon. A small space must be allotted first to some record of that terrible body of facts which compelled prompt and, as it turned out to be, far more efficient action than had yet been attempted or imagined.

SADLER'S COMMITTEE—A large number of influential gentlemen were nominated on the new committee. The evidence taken before previous ones had been principally confined to cotton factories, the most important evidence given before this was connected, therefore, with other staples. Eighty-nine witnesses in all were examined, and eleven thousand six hundred and eighteen questions asked and answered. From this prodigious mass of material we select two or three instances which may be considered fairly typical, letting the witnesses in every case speak for themselves but abbreviating somewhat their remarks.

The first evidence to be cited comes from Scotland, where the law was said to have been best observed. It is that of an overlooker, James Paterson.

"I reside at Dundee, am twenty-eight years of age, and my business is a mill-overseer. I have been acquainted with the mill system in Dundee and neighbourhood for a long time. At ten years of age I entered a mill. I worked

in the carding-room, which was very dusty. There were fourteen hours' actual work, and fifteen hours a day confinement, including meals. I suffered from shortness, and stoppage at the breast, and was forced to leave in consequence. Other children were similarly affected. I had a brother who was at that work too and he was compelled to leave from bad health, and was laid up and died of consumption. The doctor said it was occasioned by being confined at that work. My brother died at eighteen years of age, he had originally a good constitution.

“ I worked at Mr —'s mill, of Duntrun, there we worked as long as we could see in summer-time, and I could not say at what hour it was we stopped. There was nobody but the master and the master's son had a watch, and we did not know the time. The operatives were not permitted to have a watch. There was one man who had a watch. I believe it was a friend who gave it to him, it was taken from him and given into the master's custody, because he had told the men the time of the day. There was no clock at that mill. There were a great many children in proportion to the number of adults, most of them were orphans. There were some of the orphan children from Edinburgh who had been in the mill, I believe, from four to five years. The children were incapable of performing their day's labour well towards the termination of the day, their fate was to be awake by being beaten, and to be kept awake by the same method. They were guarded up to their bothies to take their meals, and were locked up in the bothies at night, and the master took the key away with him to his own bedroom, they were guarded to their work, and they were guarded back again; and they were guarded while they were taking their meat, and then they were locked

up for rest. They were not allowed to go to a place of worship on the Sunday. There were twenty-five or twenty-six of us together. There was one bothy for the boys, but that did not hold them all, and there were some of them put into the other bothy along with the guls. The ages of the boys that were put into the guls' bothy might be, I should suppose, from ten to fourteen, the ages of the guls, perhaps, from twelve to eighteen.

"The children and young persons were sometimes successful in their attempts to escape from labour and confinement. I have gone after them on horseback and brought them back myself. Those brought back were taken into the mill, and got a severe beating with a strap, sometimes the master kicked them on the floor, and struck them with both his hands and his feet. Those who had made engagements for any length of time, when they ran away, the master, if he could not find them before they got home to their relations, if they had any, he sent after them and put them in gaol. I knew a woman put in gaol, and brought back after a twelvemonth, and worked for her meat, and she had to pay the expenses that were incurred.

"When the hands worked those long hours, the master came himself and roused them in the morning, and those that would not rise, I have seen him take a pail of water and throw it upon them to make them rise. One of the means taken to secure those children and young persons from running away was that their clothes, if they had any not in use, were kept locked up, so that if they ran away they could only run away with what was on their backs."

Let an ordinary factory operative speak next, the scene being this time laid in England.

Joseph Habergam

“ I reside at Northgate, Huddersfield, in Yorkshire I was seven years of age when I began to work at Bradley Mill, near Huddersfield, the employment was worsted-spinning. The hours of labour at that mill were from five in the morning till eight at night, with an interval for rest and refreshment of thirty minutes at noon, there was no time for rest and refreshment in the afternoon. We had to eat our meals as we could, standing or otherwise. I had fourteen and a half hours’ actual labour when seven years of age, the wages I then received was two shillings and sixpence per week. I attended to what are called the throstle machines, this I did for two years and a half, and then I went to the steam looms for half a year. In that mill there were about fifty children of about the same age as I was. These children were often sick and poorly. There were always, perhaps, half-a-dozen regularly that were ill because of excessive labour. We began to grow drowsy and sleepy about three o’clock, and grew worse and worse, and it came to be very bad towards six and seven. I had still to labour on. There were three overlookers, there was a head over-looker, and then there was one man kept to grease the machines, and then there was one kept on purpose to strap. Strapping was the means by which the children were kept at work. It was the main business of one of the overlookers to strap the children up to this excessive labour—the same as strapping an old restive horse that has fallen down and will not get up. This was the practice day by day. The children were not capable of performing the amount of labour that was exacted from them without perpetual cruelty. I had at that time, similarly occupied, a brother and sister. I cannot say how old my sister was when she

began to work in the mill, but my brother John was seven. They were often sick, my brother John died three years ago—he was then sixteen years and eight months old. My mother and the medical attendants were of opinion that my brother died from working such long hours, and that it had been brought about by the factory.”

He discloses a scandalous form of cheating which was only too common at this time

“Out of the thirty minutes allowed for dinner, five minutes and sometimes ten were occupied in cleaning the spindles. On Saturday night we gave over at six o'clock, after which time we used to be made to fettle the machines, which took an hour and a half. Sometimes . . . the clock was a quarter of an hour too soon in the meal-time; we had just done fettling, and we had but half got our dinners, when the overlooker put the clock forward to one, and he rang the bell, and we were obliged to run back to work . . .

“When trade was particularly brisk I was obliged to work from five in the morning till half-past ten, sometimes till eleven. On one occasion I worked all Friday, Friday night, and Saturday.”

Benjamin Gummersil

“I am now sixteen years of age. I have been employed in piecing at a worsted mill. The hours of labour were from six in the morning to seven, and half-past seven and eight at night, half-an-hour was allowed at noon for dinner—not any time was allowed for breakfast or ‘drinking.’ I entered the mill at nine years of age, my father was obliged

to send me to the mill in order to keep me. If we are higher than the frames we have to bend our bodies and our legs—so [Here the witness showed the position in which he worked] I was a healthy and strong boy before I went to the mill. I had worked about a year for those long hours before I found my limbs begin to fail. The failing came on with great pain in my legs and knees, I felt very much fatigued towards the end of those days—then the overlooker beat me up to my work. I have been beaten till I was black and blue in my face, and have had my ears torn. I was beaten because I had mixed a few empty bobbins, having not any place to put them into separate. I was generally beaten most at the end of the day, when I grew tired and fatigued. In the morning I felt stiff, very stark, indeed, I was beaten in the morning as well, but not so much as towards the latter end of the day. I continued to attend the mill after my limbs began to fail. After I became deformed, I did not get on so well with my work as I could before. I got less in height. I cannot exactly say how tall I am now. I have fallen several inches in height. I had to stand thirteen or fourteen hours a day frequently and was constantly engaged as I have described. [The witness, at the request of the Committee, exhibited his limbs, “and they appeared to be exceedingly crooked.”] I was perfectly straight before I entered upon this labour. There were other boys deformed in the same way.”

The next evidence shall be of a woman employed in a flax mill.

Elizabeth Bentley :

“ I am twenty-three years of age, and live at Leeds. I began to work at Mr Busk’s flax mill when I was six years

old I was then a little 'doffer' In that mill we worked from five in the morning till nine at night when they were 'throng', when they were not so 'throng,' the usual hours of labour were from six in the morning till seven at night. The time allowed for our meals was forty minutes at noon, not any time was allowed for breakfast or 'drinking', these we got as we could. When our work was bad, we had hardly any time to eat them at all, we were obliged to leave them or take them home. When we did not take our uneaten food home the overlooker took it and gave it to his pigs. I was kept constantly on my feet, there were so many frames, and they ran so quick, the labour was excessive, there was not time for anything. When the 'doffers' flagged a little, or were too late, they were strapped. Those who were last in 'doffing' were constantly strapped—girls as well as boys. I have seen the overlooker go to the top end of the room, where the little girls 'hug' the can to the 'back-minsters', he has taken a strap, and a whistle in his mouth, and sometimes he has got a chain and chained them, and strapped them all down the room.

"I worked in the card-room; it was so dusty that the dust got upon my lungs, and the work was so hard. I was middling strong when I went there, but the work was so bad and I got so bad in health, that when I pulled the baskets down, I pulled my bones out of their places. The basket I pulled was a very large one; that was full of weights, upheaped, and pulling the basket, pulled my shoulder out of its place, and my ribs have grown over it.

"I have had experience in wet spinning—it is very uncomfortable. I have stood before the frames till I have been wet through to my skin, and in winter-time, when myself and others have gone home, our clothes have been frozen, and we have nearly caught our death from cold. We

have stopped at home one or two days, just as we were situated in our health ; had we stopped away any length of time we should have found it difficult to keep our situations.

“ I am now in the poor-house at Hunslet ”

A pathetic interest attaches to the last evidence to be quoted, which inspired no less a person than the Chairman of the committee with the theme of a mournful little poem, “ The Factory Girl’s Last Day,” to be found in his collected works.¹

Gillett Sharpe examined

The witness having detailed the results of excessive labour on members of his own family, was asked

“ Have you reason to think that any of the children lose their lives in consequence of this excessive degree of exertion ?—I have no doubt in my mind that such has been the case, and I may mention one instance of the kind. Four or five months back there was a girl of a poor man’s that I was called to visit , it was poorly , it had attended a mill, and I was obliged to relieve the father in the course of my office (assistant-overseer), in consequence of the bad health of the child By-and-by it went back to its work again, and one day he came to me with tears in his eyes I said, ‘ What is the matter, Thomas ? ’ He said, ‘ My little girl is dead ’ I said, ‘ When did she die ? ’ He said, ‘ In the night , and what breaks my heart is this, she went to the mill in the morning, she was not able to do her work, and a little boy said he would assist her if she would give him a halfpenny on Saturday , I said I would give him a penny,’ but at night when the child went home, perhaps about a quarter of a mile, in going home she fell down

¹ About half of it is quoted in *The Modern Factory System*, p 226.

several times on the road through exhaustion, till at length she reached her father's door with difficulty, and she never spoke audibly afterwards, she died in the night "

THE FACTORY ACT, 1833 —Such is a fair sample of the evidence accumulated by Mr Sadler's committee. Its Report, though wholly in favour of further immediate legislation for textile factories, did not immediately attain the end in view. Sadler was not present himself to reintroduce his Bill in the House of Commons, and when Lord Ashley did so next session he found himself anticipated by Lord Morpeth, whose object was to promote a compromise between the extreme pretensions of the advocates of a Ten Hours Bill and the more modified measure of factory reform favoured by himself and Sir J. C. Hobhouse. The Government was not satisfied with either scheme. It had in fact determined to take the initiative itself. Before doing so, however, it resolved on yet another inquiry, this time in the form of a Royal Commission; which should visit factory districts and whose members were to make themselves personally acquainted with the operatives' needs. A few exceptionally well-qualified men were appointed, more evidence was taken, and again with the same result. The Commissioners, contrary to many anticipations both of friends and foes, reported strongly in favour of further legislation.

It rested with the Executive now to produce an alternative Bill to the other two, and no time was lost in doing so. The measure that emerged, and which rapidly became law (3 & 4 Will. IV., c. 103), was by far the most important Factory Act yet placed upon the statute-book. It formed the groundwork and model of all future factory legislation for at least a quarter of a century, and to a large extent

remains a model still, both in this and other countries. Its principal provisions were the following. It enacted that from and after the first day of January 1834, "it shall not be lawful for any person to employ in any factory or mill, except in mills for the manufacture of silk, any child who shall not have completed his or her ninth year." That, "from and after the expiration of six months after the passing of this Act, it shall not be lawful for any person to employ, keep, or allow to remain in any factory or mill, for a longer time than forty-eight hours in any one week, nor for a longer time than nine hours in any one day, . . . any child who shall not have completed his or her eleventh year of age, or after the expiration of eighteen months from the passing of this Act any child who shall not have completed his or her twelfth year of age, or after the expiration of thirty months from the passing of this Act any child who shall not have completed his or her thirteenth year of age"—except in silk mills. Daily attendance at school for at least two hours was provided for, and two whole and eight half-holidays in the year (besides Saturday). Surgical certificates of age for young persons and children were for the first time required, and, for the efficient carrying out of the law, four factory inspectors were appointed, to whom very large powers (including in some instances a penal jurisdiction concurrent with that of magistrates) were confided. No person under the age of eighteen (instead of twenty-one) was to be employed at night; *i.e.* between the hours of 8 30 P M and 5 30 A M, and the terms *children* and *young persons* were to mean thenceforth persons between the ages of nine and thirteen, and thirteen and eighteen respectively. No mention is made of a religious obligation on employers, as heretofore, nor of any requirement for providing clothes for workers. The expressions *mill* and

factory were not specially defined, but an incidental interpretation of their statutory meaning is afforded in section 1, where the operation of the Act is confined to textile industry. Its relation to preceding enactments was settled by section xlviii, repealing 1 & 2 Will IV, c. 39, which had in its turn repealed 59 Geo III, c. 66; 60 Geo III, c. 5, 6 Geo IV, c. 63, and 10 Geo IV., cc. 51, 63, but not 42 Geo III, c. 73 (the Apprentice Act), which therefore remained in force. In a general sense the law applied to all textile manufactures where motive power other than human was employed, and to those alone, and to all persons (male and female) under the age of eighteen years employed in them, and no others. Still more generally considered, it brought factories (as then conceived of) under a system of supervision by appointed government officers, and it was the first English statute to formally recognize compulsory education as a State concern. From a yet wider point of view, it reveals the growing tendency to substitute purely *economic* for moral or religious sanctions in this kind of legislation, and marks a long step forward towards the reinstatement of the normal working day, lost to British industry for several generations.

CHAPTER IV

THE FACTORY ACTS

(1833 TO 1867)

THE FACTORY ACT OF 1833 IN OPERATION—THE RELAY SYSTEM—AGE CERTIFICATES—RENEWAL OF AGITATION—PROGRESS OF LEGISLATION—THE FACTORY ACT, 1844—SOME SUBSEQUENT ENACTMENTS — SECOND CHILDREN'S EMPLOYMENT COMMISSION—THE FACTORY ACT, 1864—THE FACTORY ACT, 1867

THE FACTORY ACT OF 1833 IN OPERATION.—The Factory Act, 1833, viewed in its widest historical connexion was an attempt to establish a normal working day in a single department of industry, textile manufacture. The way in which it proposed to do this was the following—"day" was to commence at 5 30 A.M. and cease at 8 30 P.M., within which limit of fifteen hours a *young person* (aged thirteen to eighteen) might not be employed beyond any period of twelve hours, less one and a half for meals, nor a *child* (aged nine to thirteen) beyond any period of nine hours, under similar limitations. From 8 30 P.M. to 5.30 A.M.; that is during "night", the employment of such persons was altogether prohibited. But although this is the proper historical perspective in which this Act should be regarded, it by no means follows that the above intention was acknowledged by its originators. On the contrary, they

seem to have considered the establishment of a normal working day, so far at least as adult labour was concerned, as an evil to be avoided at all hazards. In the first Report of the Central Board of the Royal Commission (28th June 1833) the following passage occurs, which puts this point beyond all question —“The great evil of the Factory System as at present conducted ”—say the Commissioners—“has appeared to us to be that it entails the necessity of continuing the labour of children to the utmost length of that of the adults. The only remedy for this evil, short of the limitation of the labour of adults, which would, in our opinion, *create an evil greater than that which is sought to be remedied*, appears to be the plan of working double sets of children ” That is to say, in the opinion of these gentlemen, the establishment of a normal working day for adults seemed a greater evil than the excessive employment of child labour.

The “remedy ” thus deliberately suggested to employers was the origin of the celebrated Relay System, about which a great deal was heard for the next ten years or so, which is a well-established device in other forms of industry, but which secured for itself an extremely evil reputation in connexion with this one.

THE RELAY SYSTEM.—To understand this rather complicated matter rightly, it is necessary to point out that the provisions of the Act of 1833 as regarded meal-times and the hours of work of protected persons were very loosely drawn. Sec. vi. enacted “That there shall be allowed in the course of every day not less than one and a half hours for meals to every such person restricted as hereinbefore provided”, so that apparently a child might be employed many hours without cessation—say from 5.30 A.M. to 1.30

P.M.—and another set come in at 1 30 and work till 8 30, the meal-time being supposed to be given in either case either immediately before or after the period of work. Or still more elaborate arrangements might be made. The law had left it optional with employers to fix the hours of work at any time within the legal fifteen provided children and young persons did not exceed their nine and twelve respectively. They could apparently, then, require any of them to begin, to end, or resume at any moment they thought fit, to the utter confusion of all exterior control, and the confounding of every attempt at systematic supervision. After a little experience of these arrangements inspectors declared that the clauses restricting the employment of protected persons were valueless so long as such anomalies were permitted to exist.

AGE CERTIFICATES—Another point in which this statute was defective was in relation to the method of proving the alleged ages of persons seeking employment. There was no Registration Act in those days, and the certificate of any physician or surgeon, founded on personal examination only, was accepted as sufficient proof of age. It is unnecessary to dwell on the unsatisfactory nature of this test, even with the best intentions and under the worthiest inducements on the surgeon's part; but it is painful to note that parents, and too often employers also, were not above lending themselves sometimes to the shabbiest artifices to pass off immature children as within the stipulated age.¹ A further defect was the ridiculously inadequate time within which an Information for an alleged breach of the law might be laid, namely fourteen days; and another (as it unhappily proved) that manufacturers were no longer prohibited (as under Sir

¹ *Modern Factory System*, p. 369.

J. C. Hobhouse's Act) from sitting in judgment on factory cases, and sometimes took unfair advantage of their position when doing so. Finally, there was a grave suspicion in the minds of reformers that the Government of the day was not very hearty in its approval of this portion of its own legislation, and looked upon its zealous enforcement with even some impatience¹

RENEWAL OF AGITATION—It will be easily gathered from these statements what the principal difficulties were in the way of the successful operation of the Factory Act of 1833. There were the imperfections of the Act itself, and there was the opposition of the employers affected by it. To these must be added considerable dissatisfaction with it among the operatives. This statute, the first really solid contribution to factory legislation, had the singular result of pleasing nobody. With regard to the opposition of employers, this should not be all set down to mere selfishness, as has been sometimes too hastily done. Many of them were thoroughly convinced (and it must be remembered that the best economists of the day were with them) that all such legislation was unsound, whilst others were unable to reconcile it with reason that the industries in which they were engaged should be alone singled out for exceptional disqualifications. Such as these considered it an absolute duty to their class to evade or outwit a law thus partial in its operation, and however wrong such a conception of duty was, it cannot be said to have been wholly without excuse under the circumstances. "Show us," they said in effect, "why we, and not others, have to submit to these impediments to money-making at the expense of our fellow-creatures, and afterwards we will join issue with you on the

¹ Compare *Life of Lord Shaftesbury*, vol. i., p. 216 *et circa*.

general subject " Until that was done, they believed their best policy to be to render the administration of the law ineffectual, and so possibly bring about its repeal, and this was the course they took It is not so easy to account for the opposition of the workers Still it is by no means impossible The legislative results of the first reformed Parliament were the occasion of dissatisfaction to many other persons besides factory operatives But, besides any general causes of complaint, there were in this case special ones as well, in connexion with the fate that had overtaken their cherished project of a Ten Hours Bill This had been completely thrust into the background as a sequel to the production of the Government measure, and when last brought to a division its principle rejected by the overwhelming majority of 238 to 93 Add to the above, that the Commission on whose report action was taken had from the first been viewed by them with dislike, they were resolved not to be satisfied with anything that resulted from it, and were not so accordingly.

It was this inauspicious moment that was selected by the Administration for paltering with the new law by proposing to minimize its utility in a vital point It will be remembered how certain clauses had been given more than two years to come into operation,¹ one of which was the clause limiting the labour of children between nine and thirteen to nine hours a day Shortly before the expiry of this period then, Mr Poulett Thompson, President of the Board of Trade, introduced a measure for the purpose of reducing the maximum age to twelve, thus prospectively depriving all children between that age and thirteen of the relief which had apparently been secured them The reformers were up in arms at once It needed only such a stimulus

¹ "Thirty months from the passing of this Act."

to set light afresh to the smouldering fires of agitation, and, thus stimulated, they broke out with redoubled violence. The inefficiency of the law, and untrustworthiness of ministers, furnished Oastler, Bull and others, with ample material for fresh diatribes, which were delivered with increasing bitterness from a still increasing number of platforms, and to an ever-increasing number of converts. The demand for a Ten Hours Bill was renewed afresh and prosecuted with increased ardour.

The Government viewed this recrudescence of agitation with some alarm, as they well might. On Mr Poulett Thompson's Bill coming to a division it escaped defeat by the narrow majority of *two*, and was of course withdrawn, and Mr Charles Hindley was only prevented from introducing a somewhat novel proposal, imposing a ten hours limit on the use of machinery, by the urgent assurances of Lord John Russell that the provisions of the late Act should be rigorously enforced in future. In the opinion of the agitators this pledge was not kept, and so dissatisfied were they at this time with the general position of affairs, and so infatuated in particular with their own scheme, that they could not be even induced to interest themselves in a very useful Bill which Mr Fox Maule now brought forward, and that failed in consequence to become law: really on account of this lack of their support, but nominally of a small amendment which was carried against it in Committee.¹ "The Bill, the whole Bill, and nothing but the Bill", such was now the popular cry.

PROGRESS OF LEGISLATION.—These extreme pretensions, combined with certain political changes just then in pro-

¹ The Government had proposed to exclude silk mills from the operation of the Act. Lord Ashley carried an amendment including these, and on this pretext the whole Bill was withdrawn.

gress,¹ had the effect of limiting for awhile further legislation for factories. The interval was far from being a barren one, however, in the history of industrial legislation generally. In 1840 Lord Ashley had procured the appointment of that celebrated first Commission on the Employments of the People, to which reference has been made (p. 45), one of whose first results was the passing of a much needed Mines Act (5 & 6 Vic., c. 69). In the following year (1846) this Commission published its second Report, destined to open up thereafter far wider fields of legislative activity than had yet been traversed or even conceived of in connexion with labour regulation generally. In the meanwhile factory legislation itself had been taken in hand again. A Conservative administration under the second Sir Robert Peel was now in office, and understood to be sympathetically disposed towards any scheme of reform short of the obnoxious Ten Hours Bill. No such compromise making its appearance, the Government decided to bring in a measure of its own, and on 7th March 1843, such a one was introduced by Sir James Graham (Home Secretary). This Bill was marked from the first by novel features. It proposed to reduce the hours of work of children to six and a half a day—to be taken either in the morning or afternoon, but not in both, but the age at which they might commence to work* at all was to be reduced from nine to eight years. During five days of the week these children were to receive three hours' instruction, either in the forenoon or afternoon, at a school approved by the Privy Council. The maximum age of male young persons was to remain at eighteen, but in

¹ In the course of 1821 a Whig Ministry, in office since the passing of the Reform Bill, had resigned, and at the succeeding general election that party was defeated.

the case of females to be extended to twenty-one, and the hours of work of both these classes of workers were to be twelve on the first five days of the week (taken any time between 5 30 A M and 8 30 P M), and until 4 30 P M on Saturday. Some provision was made for the fencing of dangerous machinery in factories, hitherto much neglected, and the recovery of lost time was confined to those of them using only water-power.

It will be generally allowed now, that, so far as it went, this was a carefully drawn and well-thought-out measure, and that many of its proposals were excellent. In particular, one might have singled out beforehand the educational proposal as being specially deserving of commendation, yet, singular to say, it was on this hitherto unknown rock of offence that the whole structure was fated to suffer shipwreck. The Dissenters strongly objected to any State interference with elementary education, and, as they were on other points powerful supporters of the Bill, though generally adverse to Ministers, their opposition proved fatal. Within the remaining time at the disposal of Government during that session no terms of compromise could be arranged, and the measure was withdrawn.

It was reintroduced on 6th of February 1844, the "religious difficulty" being compromised by the appointment of the Factory Inspector in place of the Privy Council as judge of the efficiency of schools. Most of the other clauses remained the same as before, with the striking exception that it was now proposed to extend the protection of the law to adult women! The time for filing an Information for a breach of the Act was extended to two, and in some instances three, months after the commission of the offence, and minute precautions were directed against the notorious frauds which had hindered the due execution of

the Act of 1833. But the ten hours men were still unsatisfied, and the Government were equally resolved not to give way. A series of manoeuvres in Committee¹ resulted in the withdrawal of this Bill yet a second time, and its reproduction two months afterwards almost in the exact form that it has ultimately come down to us a completed statute. On this last occasion Lord Ashley, leading the opposition, sustained a crushing defeat, the numbers being for his amendment 159, against it 297, majority for the Bill 138.

THE FACTORY ACT, 1844 —The Factory Act of 1844 (7 Vic., c. 15) is an extremely important one in the history of factory legislation, and it is absolutely necessary for anyone desiring to familiarize himself with this subject to study it carefully. It was directed, in the first place, thoroughly and systematically, against the defects which hindered the due administration of former Acts, and originated an elaborate machinery for keeping them in check. Most interesting is it to compare its provisions with those of the first Factory Act, for the purpose of marking the changed tone that characterized the new legislation in regard to social sanctions, and scarcely less so to compare the debate that preceded its enactment with that preceding the enactment of the Act of 1833, with economic sanctions in view. By this means the most readily can the advance made in the comprehension and formal treatment of certain important objects of such legislation be seen, while certain others will be noted as relinquished. Its operation was exclusively confined to textile industry, the term factory being now for the first time specifically defined in that sense (p. 3),

¹ A description of these will be found in *The Modern Factory System*, pp. 386, 387.

and to that province of it only where exterior motive power was employed in manufacture. Though not destined to be a final settlement of labour troubles even in that limited sphere, it was a statesmanlike and vigorous measure of reform, honourable alike to the motives, knowledge and foresight of its promoters.

This Act reduced the hours of work for children between eight and thirteen (not *nine* and thirteen as formerly) to six and a half a day, either in the morning or afternoon, no child being allowed to work in both on the same day, except on alternate days, and then only for ten hours. Young persons and *women* (now included for the first time) were to have the same hours, *i e* not more than twelve for the first five days of the week (with one and a half out for meals), and nine on Saturday. These hours were to be reckoned consecutively from the period of commencement, half-an-hour at least being allowed for a meal before 1 P.M., and the whole meal-time given between 7.30 A.M. and 7.30 P.M. Eight half-holidays, besides Christmas Day and Good Friday and the usual interval on Saturday (and of course Sunday), were to be allowed every year, notice of which was to be given beforehand. The regulations about recovering lost time were revised, and certificates of age were to be granted in future only by surgeons appointed for the purpose. Accidents causing death or bodily injury were to be reported to these surgeons, who were to investigate their cause and report the result to the inspector. Dangerous machinery was to be fenced. The factory was to be thoroughly washed with lime every fourteen months, or painted with oil once every seven years. An abstract of the law was required to be hung up in every factory, and a Notice, on which were to be inscribed the name of the inspector, the time of commencing and ceasing work, and the name of some public

clock by which the hours of labour were regulated. A Register was likewise to be kept, in which were to be entered the names of all children and young persons employed, the dates of the lime-washing and some other particulars. Certificates of school attendance were to be obtained in the case of children, the employer being responsible for the school fees. Inspectors were deprived of their magisterial jurisdiction, but in some other particulars their powers were increased.

SOME SUBSEQUENT ENACTMENTS —The next two years were years of great interest in the political and industrial world but not of special note in the history of factory legislation. A Print Works Act (8 and 9 Vic., c. 29) was passed however in 1845, containing requirements closely akin to those of the Factory Acts, and similar provision for administration. This statute was the earliest fruit of the second Report of the first Children's Employment Commission. It prohibited work by women and children between 10 P.M. and 6 A.M. but not by "young persons," and was otherwise faulty in respect to the regulations as to duration of labour, meal-times, school attendance and sanitation. It was subsequently repealed and incorporated with other Acts, and is principally interesting now as being the first one of the series applied to a process other than strictly textile manufacture. Following it at intervals of some distance came the Bleach Works Act (23 & 24 Vic., c. 78), with its amending Acts (25 & 26 Vic., c. 8, 26 & 27 Vic., c. 38, and 27 & 28 Vic., c. 98); and the Lace Works Act (24 & 25 Vic., c. 117). These, like the above, have been since incorporated in one general law.¹ In the mean-

¹ Namely, in *The Factory and Workshop Act*, 1870 (33 & 34 Vic., c. 62), itself incorporated in *Factory and Workshop Act*, 1878 (41 Vic., c. 16).

while the agitation for a Ten Hours Bill had by no means ceased Early in 1846 Lord Ashley again brought forward a measure cast in this mould, which, on his defeat at the General Election that year, was taken up by Mr John Fielden, and ultimately pressed to a division, when the Government escaped defeat by the narrow majority of ten. The next year the Whigs were in office, and Lord John Russell Prime Minister Mr Fielden reintroduced his Bill, and its progress through Parliament was one continued triumph The second reading was carried by a majority of over a hundred, the third reading by eighty-eight, while on the critical division in the House of Lords the numbers voting were, fifty-three for, and only eleven peers against it After this great success it received the royal assent forthwith and became law almost immediately (8th June 1847).

With the enactment of this law (10 Vic, c 29) the long struggle for a Ten Hours Bill is generally held to have come to a close. It limited the hours of labour to sixty-three per week from 1st July 1847, and to fifty-eight per week from 1st May 1848, which with the stoppage on Saturday afternoon was the equivalent of ten hours work per day Great was the rejoicing in the manufacturing districts when its success was assured, but events showed this rejoicing to be premature The Bill contained a fatal defect It did not provide exactly *when* the hardly-won ten hours were to be worked between 5 30 A M and 8 30 P M., so that apparently they might be taken any time within those limits The result was the immediate reintroduction of the discredited Relay System, with all its opportunities for trickery and evasion, and renewed discontent among the operatives Early in the session of 1850 Lord Ashley brought this matter forward for debate. He was met in a

conciliatory spirit by Sir George Grey, then Home Secretary, who proposed as a compromise to fix the period of employment for protected persons from six in the morning till six in the evening in summer, and from seven in the morning till seven in the evening in winter (with one and a half hours out for meals), and that all work should cease at two o'clock on Saturday the effect of which would be to slightly increase the weekly working hours from fifty-eight to sixty, while rendering the enforcement of the definite working day practically secure Lord Ashley was for accepting this proposal, while Mr Oastler and some others were against it The contest was short and sharp, the official suggestions being assailed from very diverse quarters; but eventually a measure (13 & 14 Vic, c 54) containing the above provisions became law (5th August 1850) It formed an admirable and most successful sequel to the Acts of 1844 and 1847 By it the ten hours dispute was finally set at rest, and the normal working day really established throughout the whole range of industries affected. Some anomalies still remaining were remedied by two subsequent statutes; 16 and 17 Vic, c 104 and 19 & 20 Vic, c 38, the former dealing principally with the employment and education of children, the latter with the fencing of mill-gearing and machinery, and with these the elder series of Factory Acts, those specially confined to the textile and closely related industries, came to an end for twenty years at least.

SECOND CHILDREN'S EMPLOYMENT COMMISSION.—Not so the general course of protective labour legislation, which, on the contrary, began from this time to spread from point to point in ever-widening circles of usefulness, thus gradually but certainly disclosing its real character and aims.

CHILDREN'S EMPLOYMENT COMMISSION 89

The direction of this advance was along the usual lines. The disclosures made in the second Report of the first Children's Employment Commission had had, we have already observed, a marked effect on public opinion. Their immediate result was seen in the passing of a Print Works Act ¹, and subsequently, Bleaching and Dyeing Acts ², and, still more remotely connected with the conventional notion of factory labour, a Bakehouse Act (July 1863). But the indisposition to push these investigations to their only logical conclusion and require a similar protection for all competitive industries was still very strong. The conception of a factory as necessarily a place of textile manufacture only stood in the way, and it was also not unreasonably pleaded at first that the system of factory inspection was comparatively novel, nor had yet been particularly successful. But under the elaborate provisions of the Act of 1844, applied to the clearly defined hours of labour introduced by that of 1850, factory inspection presently became a recognized success, a source of increasing satisfaction to the operatives, and even at length to masters who found no evil results flowing from it of the magnitude they had been led to expect, and many good results, the nature and quality of which they had not at first foreseen. Under these circumstances, all the Government could plead for now, in view of the ever-increasing pressure put upon them both by facts and arguments, was more delay and fuller information before embarking again on the wide sea of industrial enterprise with further projects of reform. The weightiness of that plea, if not its abstract justice, was allowed by reformers, and yet another appeal to the arbitration of facts decided on. In 1861 a new Royal Commission was appointed to go fully over the whole ground again, being

¹ *Ante*, p. 86

² *Idem*

issued to three gentlemen, Hugh Seymour Tremenheere, Richard Dugard Granger and Edward Carleton Tufnell. "This second great Commission, whose members laboured," says Herr von Plener,¹ "from 1862 till 1866 with extraordinary diligence, and to an almost complete exhaustion of the subject, found a much easier field of action than did their predecessors in 1840 and following years. The decided improvement of the textile labourers in moral and material respects, and the continuous increase in production, notwithstanding the reduction in the hours of labour, had gradually convinced the manufacturers and the public at large that their originally violent opposition to the legal reduction of labour was fallacious and groundless, and that its further extension to other branches of industry would not be fraught with such ruinous consequences as had been generally supposed and predicted in 1843, the exaggerated description of which was the principal reason why no practical course was given to the recommendation of the first Children's Employment Commission—except in the case of mines—and of Print and Bleach Works, etc., as before explained." The result more than justified, as usual, the anticipations of those who were urging further legislation, the facts elicited being at least as bad as anything that had been proved against textile manufacture. In the trade of *letterpress printing* in London, for instance, certain houses where books and newspapers were printed, had acquired, we read, the name of "slaughter-houses," owing to the exceptional mortality prevailing there, especially amongst boys. "Similar excesses," writes Karl Marx,² "are practised in *book-binding*, where the victims are chiefly women, girls, and children." "A classical

¹ *English Factory Legislation*, p. 56

² *Capital*, vol. II, p. 466 (Swan Sonnenschein, 1887).

CHILDREN'S EMPLOYMENT COMMISSION 91

example of overwork," he continues, " . is afforded by *brick and tile-making* Between May and September the work lasts from five in the morning till eight in the evening, and where the drying is done in the open air, it often lasts from four in the morning till nine in the evening Work from five in the morning till seven in the evening is considered 'reduced' and 'moderate' Both boys and girls of six, *and even of four years of age*, are employed They work often longer than the adults " In a certain field at Mosley, *e g* , " a young woman, twenty-four years of age, was in the habit of making two thousand tiles a day with the assistance of two little girls who carried the clay for her and stacked the tiles These girls carried daily ten tons up the slippery sides of the clay pits, from a depth of thirty feet, and then a distance of two hundred and ten feet " He cites the opinion of one of the Commissioners on the general subject of child labour in this occupation as follows — " It is impossible," this gentleman writes, " for a child to pass through the purgatory of a tile-field without great moral degradation the low language which they are accustomed to hear from their tenderest years, the filthy, indecent and shameless habits, amidst which, unknowing and half wild, they grow up, make them in after life lawless, abandoned, dissolute " One " frightful source of demoralization " was " the mode of living " — but the details are painful, and not immediately pertinent, and may be omitted In the industry of *straw-plaiting* about seven thousand children were employed They commence to be employed, we learn, " generally in their fourth, often between their third and fourth year " " Education, of course, they get none " . " The straw cuts their mouths, with which they constantly moisten it, and their fingers." The space allowed for working

was in one instance " $12\frac{2}{3}$, 17, $18\frac{1}{2}$ and below 22, cubic feet for each person," taken from actual measurement, the lowest of these numbers representing "less space than the half of what a child would occupy if packed in a box measuring 3 feet in each direction" In the occupations carried on in the "Black Country"—nail-making, chain-making and the like—many atrocious evils were disclosed, and also in the miscellaneous trades in and about Birmingham Terrible dangers were found to characterize the Sheffield industries. But possibly the worst conditions of environment were found to belong to the manufacture of articles of *wearing apparel* "The description of the workshops . . . surpasses the most loathsome phantasies of our romance writers" All the smaller classes of industries, indeed, were found—as might have been expected—in an even more pitiable condition than the larger classes, and places where machinery was not used than where it was Thus "Young people are worked to death at turning the looms in *silk-weaving* when it is not carried on by machinery." Where it was carried on by machinery they had, of course, the protection of the Factory Acts The same remark applied, of course, to *hosiery* and *lace-making* The Factory Act of 1861 regulated the making of lace so far as it was done by machinery, but lace-finishing is done "either in what are called 'Mistresses' Houses,' or by women in their own houses, with or without the help of their children." "The number of the workwomen employed in these work-rooms varies from twenty to forty in some, and from ten to twenty in others The average age at which the children commence work is six years, but in many cases it is below five. The usual working hours are from eight in the morning till eight in the evening, with one and a half hours for meals, which are taken at irregular intervals, and often in the foul

workrooms. When business is brisk the labour frequently lasts from eight or even six o'clock in the morning till ten, eleven, or twelve o'clock at night" . It is not at all uncommon in Nottingham (writes a Commissioner) to find fourteen to twenty children huddled together in a small room, perhaps not more than twelve feet square, and employed for fifteen hours out of the twenty-four at work that of itself is exhausting from its weariness and monotony, and is besides carried on under every possible unwholesome condition" Yet, "when women and their children work at home . . . the state of things is, if possible, *even worse*!" Another kind of lace was found to be made in "lace schools." "The rooms are generally the ordinary living rooms of small cottages, the chimney stopped up to keep out draughts, the inmates kept warm by their own animal heat alone, and this frequently in winter." In other cases "these so-called schoolrooms are like small store-rooms without fire-places . The overcrowding in these dens and the consequent vitiation of the air are often extreme, and added to this is the injurious effect of drains, privies, decomposing substances, and other filth usual in the purlieu of the smaller cottages." As regards space in such instances "In one lace school, eighteen girls and a mistress—35 cubic feet to each person; in another, where the smell was unbearable—eighteen persons and $24\frac{1}{2}$ cubic feet per head", and age "In this industry are to be found employed *children of two and two and a half years*!"¹

THE FACTORY ACT, 1864.—This Commission issued its Reports at intervals during the progress of the inquiry,

¹ This last statement may well appear incredible. It is necessary to state, therefore, that it is taken from the Chld. Empl Comm, II. Rep (1864), p. xxx.

which was conducted on a prearranged plan. The first set of industries dealt with were such as had already been unfavourably reported on by the Commissioners of 1840—and included the manufacture of earthenware—"except bricks and tiles"—of lucifer matches, of percussion caps, of cartridges, and the two "employments" of paper-staining and fustian-cutting. All of these were again strongly animadverted upon, and a Bill was brought in forthwith to afford them the protection recommended.

The Act that followed (27 & 28 Vic, c 38) was passed on 25th July 1864. It inflicted a death-blow on all current conceptions of the mission of factory legislation and may even be said to have commenced a new industrial era. The conventional notion of a factory, and of any scheme of factory legislation founded on employment in such, was hereby utterly abandoned, and not merely several new processes, not only isolated as well as congregated labour (as in the case of fustian-cutting), but even quite other *employments* were assumed henceforward to be fit subjects for it. The last was in reality a conclusive step. If some employments were proper subjects for Factory Acts, with no other qualifications for inclusion beyond the hardships endured in them, why not others, and every other, in a like way? To such an enlargement of the possible category there was practically no limit, and the full economical counterpoise to the Industrial Revolution seemed already on the very eve of fulfilment.

THE FACTORY ACT, 1867.—For a while, too, it looked as if a no less consummation were actually contemplated by the legislature. When the full Reports of the second great Inquiry into the Employments of the people were published, it was found that the commissioners unanimously recom-

mended the extension of the system of factory inspection to a number of occupations previously regarded as quite outside its sphere, and its modified application in others, hereafter to be dealt with, to an extent which seemed practically to exhaust the whole field of material labour. Bills were prepared with all despatch, accordingly, and took formal shape next year. The first of these was the Factory Extension Act, 1867 (30 & 31 Vic, c 103), the second, the Workshop Regulation Act of the same year (30 & 31 Vic, c 146). The former extended the principles and practice of preceding Factory Acts to the following industries, and places where industries were carried on, in the first place, *specifically* as follows —

- 1 Any blast furnace or other furnace or premises in or on which the process of smelting or otherwise obtaining any metal from the ores is carried on (which furnace or premises are hereinafter referred to as a blast furnace) .
2. Any copper mill
- 3 Any mill, forge, or other premises in or on which any process is carried on for converting iron into malleable iron, steel, or tin plate, or for otherwise making or converting steel (which mills, forges, and other premises are hereinafter referred to as iron mills)
- 4 Iron foundries, copper foundries, brass foundries and other premises or places in which the process of founding or casting any metal is carried on
- 5 Any premises in which steam, water, or other mechanical power is used for moving machinery employed—
 - (a) In the manufacture of machinery .

- (b) In the manufacture of any article of metal not being machinery
 - (c) In the manufacture of india-rubber or gutta-percha, or articles made wholly or partly of india-rubber or gutta-percha
- 6 Any premises in which any of the following manufactures or processes are carried on, namely,
- (a) Paper manufacture
 - (b) Glass manufacture
 - (c) Tobacco manufacture
 - (d) Letterpress printing
 - (e) Bookbinding

and *generally* to,

7. Any premises, whether joining or separate, in the same occupation, situate in the same city, town, parish, or place, and constituting one trade establishment, in, on, or within the precincts of which fifty or more persons are, or have been during the preceding year, employed in any manufacturing process

and,

Every part of a factory shall be deemed to be a factory, except such part, if any, as is used exclusively as a dwelling

A very wide meaning was assigned to the expression "manufacturing process".

"Manufacturing Process" shall mean any manual labour exercised by way of trade or for purposes of gain in or incidental to the making any article or part of an article, or in or incidental to the altering, repairing, ornamenting, finishing, or otherwise adapting for sale any article—30 & 3 Vic., c 103, s 3.

Apparently it only remained now to include premises

where less than fifty persons were at work "in adapting for sale" an *article* to cover every material industry

A striking and exceptional characteristic of this very comprehensive statute lay in the numerous modifications which it contained, chiefly in the direction of mitigating the stringency of the normal working day. Omitting purely temporary exceptions, the following were the principal ones. Boys above sixteen might be employed in printing-offices on alternate days for fifteen hours a day (less meals), and in alternate weeks at night. In bookbinding establishments, young persons above fourteen, and women, might work fourteen hours, and in paper mills and glass works the customary hours, provided they did not exceed sixty altogether in a week. Night work was permitted to *male* young persons in blast furnaces, iron mills, paper mills, letterpress-printing works, and works driven exclusively by water-power, provided they were not employed either on the preceding or following day, and, in the case of blast furnaces, for not more than six—in the case of paper mills, seven—nights in one fortnight. A power was vested in the Secretary of State of extending such modifications at pleasure, where, in his opinion, "the customs or exigencies of certain trades" required it, and also of sanctioning alterations in the usual working hours (from six to six o'clock, to seven to seven, or to eight to eight), and in other matters of detail. The Act was supplementary to, and not in place of, any preceding Act, it effected no change in the ages of protected persons, in the normal hours of labour, nor in the mode of administration that had been hitherto found effective. Its mission was simply to extend the protection of the State, found to be of use in certain industries and employments, to other ones, on the wholly unambiguous plea that they stood in equal need of it.

CHAPTER V

THE FACTORY ACTS

(1867 to 1901)

THE WORKSHOP REGULATION ACT—THE FACTORY ACT, 1871—THE FACTORY ACT, 1874—ADULT LABOUR—THE FACTORY ACT, 1878—"SWEATING"—THE FACTORY ACTS, 1883 AND 1889—THE FACTORY ACT, 1891—THE FACTORY ACT, 1895—THE FACTORY ACT, 1901

THE WORKSHOP REGULATION ACT.—The Factory Act of 1867 extended the current system of factory inspection to a great variety of new industries, but made no important alterations in it, nor in the general practice of factory legislation. But besides the occupations brought thus under supervision a large number of similar ones which had engaged the attention of the second Children's Employment Commission remained untouched, such as domestic occupations, small handicrafts, and generally all those forms of manual labour carried on in workplaces where less than fifty persons were employed at once (see p. 96). After prolonged consideration it was decided to subject these to supervision also, but supervision of not quite the same kind, and a supplementary statute (30 & 31 Vic., c. 146) was devised and enacted for that purpose. The title given to this one was the Workshop Regulation Act, the term *workshop* being now introduced for the first time into

this series of laws Its purpose is stated with great distinctness in the preamble "Whereas by the Factory Extension Act, 1867, provision is made, amongst other things, for regulating the hours during which children, young persons and women are permitted to labour in any manufacturing process conducted in an establishment where fifty or more persons are employed And whereas it is expedient to extend protection so far as respects the regulation of the hours of labour to children, young persons, and women working in smaller establishments Be it therefore enacted," etc , a series of provisions following, which resembled, while they did not coincide with, the provisions of preceding Factory Acts Thus, while protected persons might only work the same aggregate number of hours per day in both, a wider latitude was allowed to workshops than factories in the selection of those hours—*i.e.* any period of the same length between 6 A.M. and 8 P.M. for children, and between 5 A.M. and 9 P.M. for women and young persons—on ordinary weekdays, and until 4 P.M. on Saturday. Other relaxations of the prevalent obligations in factories followed Surgical certificates were not required for children and young persons in workshops, nor was it compulsory to keep a Register in them The Half-Time System of education, now thoroughly established in factories, was supplanted here by a very inferior system of ten hours' schooling a week, and many modifications even of these maimed regulations were left to the discretion of the Home Secretary for the time being But the greatest novelty was the means by which it was proposed to enforce this Act, namely, through "local authorities" in the several districts where the workshops were situate Factory inspectors were only authorized to visit them and report on their condition, the responsibility of actually

putting the law in force was taken out of their hands. Another very important peculiarity resided in the definition of the term workshop, which, though in some respects more extensive in conception than that of the kindred term factory, contained a limitation of a highly important kind. Section IV enacts. "Workshop shall mean any room or place whatever, whether in the open air or under cover, in which any handicraft is carried on by any child, young person, or woman, *and to which and over which the person by whom such child, young person, or woman is employed has the right of access and control*", so that a person might be employed at home, as an "out-worker" for instance, in the same industry and under still more unhealthy conditions than in a factory, without the employer having any responsibility in regard to that place or person. Lastly, the definition of "employed" was strictly confined to being "occupied in any handicraft", and this taken in conjunction with the definition of *handicraft* itself prescribed a special limitation in yet another direction of very great significance. Handicraft was defined to mean "any manual labour exercised by way of trade or for purpose of gain in or incidental to the altering, repairing, ornamenting, finishing, or otherwise adapting for sale any article"—which removed, therefore, from the purview of the law all workers except those engaged in the production of actual commodities, as *e.g.* such as are employed in distribution, transport, or in rendering any immaterial service, whether concerned about wealth creation or not.

The full importance of these peculiarities of the Workshop Act, and their effect on the future course of protective labour laws, will appear more fully in the sequel. For the moment it is more to the purpose to consider it and the Factory Extension Act analogically, and taken together, as

the last results of a long series of efforts directed towards the same end—the amelioration of the modern worker's lot, and viewed in this way, and consequentially, it certainly does not appear that the high hopes entertained of their common purpose and powers were justified by events. It did not turn out, as some sanguine people anticipated, and even stated,¹ that the whole field of material industry was forthwith covered and the limit of this kind of legislation reached, on the contrary, they mark a retrogression as well as an advance in the general development of events, and their analogy with preceding Acts is by no means always in their favour. True, a vastly wider area of industrial activity was brought thus within the cognizance of statute law, but that law was rendered less stringent in parts, and great and obvious gaps in the general scheme remained. The number of exceptions to the broad principle of the normal working day, for instance, either actually or potentially enacted (see p. 97), and the shifting about of the working hours permitted (in face of all precedents) in workshops, were in striking contrast with the admirably uniform regulations which had on those points dominated factory legislation since 1850, whilst the novel mode of administering this Act, however undeniable its inherent advantages, was at first a conspicuous failure. It soon became apparent that, whatever the intention of their framers, the dual Acts of 1867 were not destined to be a crowning effort of legislative wisdom.

THE FACTORY ACT, 1871.—The first objections came principally from employers—as ever heretofore. The

¹ Von Plenel, for instance, writes “that all work done for wages by young persons and women” was by means of these Acts, “placed under supervision and subject to distinct regulations” (*English Factory Legislation*, p. 85). This is an astonishing exaggeration.

limitation of working hours (even with the many modifications allowed) was said to be oppressive in many cases, and inimical to the interests of trade. The interaction of the two statutes too, administered side by side by dissimilar authorities and with conflicting provisions, was confusing and annoying, and led to the strangest anomalies. On this point the inspectors also spoke out with emphasis, and the workpeople joined in the complaint. Presently new developments appeared. The objections of employers grew less as they became more familiar with the earlier statute, whilst the administration of the later one became more and more a "dead letter." The Factory Extension Act, like other Factory Acts, was found to be less alarming in experience than prospect, but the Workshop Act, owing to the appointed authorities either failing to carry it out or repudiating the obligation to do so, was generally ignored. An obvious deduction from these two sets of circumstances was the propriety of transferring its administration to the Factory department, but first a rectification of preceding anomalies had to be made. This was done by the enactment (in 1870) of a short Act (33 & 34 Vic., c. 62) bringing printing, bleaching, and dyeing works up to the standard of the Factory Act of 1867. Then the way was clear. A Factory and Workshop Act—these terms now for the first time combined—passed the legislature in 1871, by which the enforcement of the Workshop Regulation Act was transferred, just as it stood, from the local bodies to the inspectors of factories, to be administered by them alongside their other duties.

At this point in the narrative it seems proper to pause, for the purpose of taking a survey of the path traversed since the Factory controversy entered on that new and wider phase typified by the changed significance of the distinguishing

term, and with a view to what is to follow. The early modern conception of a factory, it will be remembered, was of a place (p. 3) where industry was "congregated and divided within an establishment of definite bounds" the establishments thus designated being further limited by law to such as were "devoted to spinning or weaving certain fabrics by power." The Act of 1844 mentioned those included fabrics by name. Under the Factory Act of 1864, a complete alteration of this signification occurred, and several new industries were incorporated comprising not only manufactures but "employments," and not only congregated labour but petty industries. The Factory Act of 1867 added greatly to this list. Under the Workshop Regulation Act an attempt was made, or appeared to be made, to practically complete it, but it was considered that the vast number of new occupations which would thus be brought in, and the obscure places where many of them were carried on, would render State inspection a task of great difficulty, and a new system was inaugurated of placing them partly under local and partly under imperial control. This new system, it may be noted, was in complete harmony with the spirit of the time, as since revealed in such legislation, for instance, as the Education Acts and Agricultural Holdings Act, but it failed owing to inherent defects in the law itself. It was incontinently abandoned, and the multifarious duties, judged but four years previously to be quite beyond the power and scope of the Factory Department to undertake, were transferred to it nevertheless, to be dealt with as best they might. It is clear enough now, it was probably clear then, that such a proceeding could be only tentative and experimental, and events have proved this to be the case. But it is extremely interesting to contemplate that change of

front as part of a general advance made good by this time in the conception of the rightful sphere of State interference with labour. Workshops as well as factories, then, were fit subjects of factory legislation (still so called), and it was even possible to put them under the control of government inspectors without offence. But this term factory had been repeatedly expanded from very narrow limits indeed to the very indefinite ones we have instanced. Was the same fate in store for workshops? Or would the qualifying definitions introduced in the latter case, and still retained, oppose an efficient barrier against that inclusion of nearly all branches of industry which was supposed to be in contemplation? Should they be allowed to do so? Was there any longer any need, in fact, for the dual titles at all? Why not the same regulations for both places? Nay, would it be possible to stop even here? Why only material industry?—and was the inspection of the future to be a centralized or localized function, or local and central combined? Such was the pass the controversy, once so narrow, had come to, and in this condition of uncertainty and of vague possibilities was left by the legislation of 1871.

THE FACTORY ACT, 1874 —In the meanwhile an agitation had been going forward in the country, little concerned indeed with these speculations, and applying only to a particular class of works, but very closely related to the history and fabric of factory legislation. A demand had been made in certain quarters for specially limiting the time of women's work in textile factories, and subjecting those of them who were mothers to exceptional disqualifications on that account. With regard to the first of these proposals, it was nominally advocated in the interests of

women themselves, with regard to the second, nominally in the interest of their offspring. In the latter case, as no action ensued then it is unnecessary to say anything more about it now. The other agitation is deserving of careful consideration from several points of view. What was the meaning of this sudden demand for further limiting women's industry, and why was it confined to textile factories? There is little doubt now that it originated in the desire for a general shortening of the working day in that industry, for male and female operatives alike—that women were, in fact, the stalking-horse behind which this larger demand was but partially concealed. But why in this particular class of works alone? Were there not other employments—even among those subject to law—where women were notoriously exposed to greater hardships and worked longer hours, and many more far worse still untouched by factory law at all? The attempt to answer these questions will bring us face to face with a new determining influence in the history of the Factory Acts, and lead us eventually towards a long postponed discussion, as to who were in very truth the proper objects of that form of legislation.

The textile operatives, besides being the first to benefit by factory laws, had by this time become a well-organized body outside their sphere, they had evolved a powerful and well-disciplined trade union to represent their interests. Other representative trades had done the like before, several to an even greater degree, whilst many more still remained unorganized and unregulated either from without or from within. Now, the best organized, as the building and engineering trades, had early set about obtaining a reduction of working hours, extra-judicially and by the mere force of combination, so that at the passing of the

Factory Extension Act it came about that legal hours were sometimes in excess of customary ones among the industries brought under its control. This was naturally displeasing to the already favoured textile trades, especially after their disappointment as to the ten hours day¹, and they set about obtaining a further reduction too, only they availed themselves of different machinery for the purpose they agitated under the shadow of an Act of Parliament, an instrument with which they had been long familiar and to which they already owed much. The artifice was of course a perfectly legitimate one, and turned out a great success. They obtained their shorter day, whilst trades that had not agitated and were not organized continued as before. This was an object lesson of extreme importance to all branches of industry, but what is specially interesting in the present connexion are mainly two things—the official sanction thus given to the contention that the regulation of all labour in textile factories is involved in the regulation of certain kinds of labour there, and the spectacle of the modern trade society relying (like the mediæval guild) on State aid for the accomplishment of its ends. Hitherto, agitators for factory reform had been mostly philanthropic persons, generally outside the sphere of the interests affected, or, when the operatives themselves had joined in any number, it was commonly in response to their highly pitched appeals. The new agitation marked the entrance on the scene of the trade association, in place of the beneficent outsider, of a sectional, no longer national, impulse of action—with consequences to the Factory System and the Factory Acts which are far as yet from being all foreseen.

The immediate consequence was the complete success of

¹ Chap. 1v

the agitation, as shown in the passing of the Factory Act of 1874 (37 & 38 Vic, c 44), which took half-an-hour a day off textile factories alone, leaving all others still subject to the settlement of 1850. Some other changes were the raising of the age at which a *child* might work as a *young person* (i.e. for a full day) from thirteen to fourteen years (but a child of thirteen who had the requisite educational qualification might be employed as if fourteen), and certain alterations respecting their attendance at school with a view to making the schooling more efficient. The surgical certificate of age was changed now to a certificate of fitness, and the exceptional privileges allowed to silk factories were abolished. These were valuable, if partial, gains. By far the greatest interest that attaches to this Act resides not in them, but in the debates—in Parliament and elsewhere—by which it was preceded and in which, almost for the first time, the relation of adult labour to factory legislation was discussed in a comprehensive, though characteristically indirect manner. As the point is of extreme interest in view of some recent developments it will be desirable to deal with it at some length.

ADULT LABOUR.—The form in which adult labour first became directly subject to the provisions of the Factory Acts was by the inclusion of women under them in 1844 (see p 86). It is curious to notice in looking back to the debates of that year how little interest this proposal excited at the time. It appears to have been an entirely spontaneous one on the part of Sir Robert Peel's administration, which was then in power. "No section of the operatives"—writes the late Mr Henderson¹—"had ever proposed to

¹ *Great Industries of Great Britain*—"Industrial Legislation," by James Henderson, one of H.M. Superintending Inspectors of Factories, vol. iii, p 43 (Cassell and Co.)

impose this exceptional restriction upon the work of adult women, and it was stated during the debates in Parliament that not a single petition had been presented in favour of it " The fight had hitherto ranged round the *subjects* of legislation the particular industries that were to ~~be~~ included and it had been tacitly assumed that only juvenile labour should be protected Suddenly this tremendously revolutionary change is made, and passes almost without comment Then for a while the former process goes on First one new industry, and then another, is swept within the legislative circle, which is continually widened to receive them, and at length (in 1867) something like an attempt to comprehend all is made—though we notice at this stage the impulse, hitherto triumphant, waxing somewhat faint in the effort (as shown in the varying provisions of the statutes of that year) And now arises a proposal to further limit women's work in a very special direction, and forthwith, after a silence of nearly thirty years, the primal question is brought forward of the propriety of legislating for it at all What does it all mean? Many explanations are forthcoming "Manufacturers and employers"—says Mr Henderson—"no doubt looked with some indifference upon the proposal to include adult women from the fact that practically a restriction on the hours of work upon children and young persons in a textile factory is a restriction upon all who are employed . .," for "the conditions of labour in a factory are such that one section of the workpeople cannot be profitably employed without the other, and a limitation upon one section proves a restriction on the whole" This is the argument which found successful expression in the Act of 1874 Again, "It is probable that the source of much of the agitation which has recently arisen over this question about the

restriction of the hours of work of adult women, may be traced to the fact that in subsequent extensions of the factory regulations to miscellaneous trades and occupations, this special feature of factory labour was lost sight of. When the hours of work in occupations in which adult women were mainly or exclusively employed came to be limited, a sharpness was given to the contrast between the restrictions imposed upon them and the freedom enjoyed by adult men, which did not previously exist" (*idem*). Another explanation is that as women had been directly legislated for by the Mines Act of 1842 it became a kind of necessity to include them in the Factory Act of 1844, that precedent being considered sufficient justification. It is to be remarked also that the popular demand for a ten hours working day, like the modern demand for eight hours, or the abortive demand for a restriction on machinery—which had some powerful adherents just at this time (p. 81)—was a demand for the restriction of male and female labour, adult and young alike.

But the real reason why the discussion of this particular feature of factory legislation came so prominently to the front just then can scarcely with justice be relegated to any of these causes. It is found in quite another set of circumstances, which are the following. During the quarter of a century that had elapsed since 1844 a highly respectable party had arisen in this country demanding for women equal powers and privileges with men, all laws and institutions notwithstanding. Now, equal privileges implied equal responsibilities, and this party—which greatly valued itself on its logical position—fixed on the Factory Acts as an obvious case in point where equal responsibilities or equal privileges (according as they were regarded) were not entrusted to both sexes. A man might work as long as

he liked, or could be made, a woman only (in certain occupations) as long as the law considered just and right. Where was the sanction for this difference of treatment, and had it ever really been shown to exist? Was not a woman of thirty (say) as good a judge of her own requirements as (say) a man of thirty? If not, why not? The discussion proceeded with vigour and, at length, almost with acrimony the women's advocates demanding—not the protection of their industry from unequal competition by the inclusion of men's, and the wider extension of factory law to other occupations (as to-day)—but their complete withdrawal from women the abrogation, in short, for both alike, of those legislative tendencies which were obviously gaining ground on every side. This was allying themselves with the "high and dry" school of economics, and it may be questioned if the general cause of women's advancement has not suffered therefrom. Moreover, it was a hopeless enterprise in view of the steady flow of popular sentiment the other way. Professor Fawcett was the most distinguished mouthpiece of this party in the House of Commons; Mr Mundella and Sir Richard Cross (Home Secretary) were conspicuous on the other side. Throughout the debate no direct representative of the interests of adult men appeared, while the case of industries neither self-organized nor under protection by the State was quite overlooked. The result was that only one half the problem of adult labour ever came under discussion at all, and it is provoking discussion still, that the reactionaries gained some apparent concessions, which were but the prelude to an almost general rout.

THE FACTORY ACT, 1878 —It will be easily understood after this summary that the various motives of legislation which had now been enunciated, the numerous Acts that

had been passed, and the complicated and divergent provisions appertaining to them, had introduced great confusion into the administration of factory law. There had grown up, not merely a very general uncertainty as to the proper ~~objects~~ to be dealt with, but renewed uncertainty as to its subjects likewise. All sorts of occupations, accordingly—wandering trades, the business of transport, shop labour, even at length domestic service, began to agitate for the application of a Factory Act (so called) to them, and, on the other hand, a reverse movement against supervision, on the usual plea that it injuriously affected trade, claimed some attention. To assimilate those dissimilar provisions, and consider these contending claims, a time-honoured device was resorted to. A Royal Commission was appointed to take the whole matter into consideration. This Commission was issued to several distinguished gentlemen, some of whom are still living. They laboured with much assiduity, and accumulated a great quantity of valuable material, the result being given in a Report published in 1876, and their principal recommendations were embodied afterwards in an Act of Parliament (41 Vic, c. 16) often called the Factory Consolidation Act, but whose proper title is the Factory and Workshop Act, 1878.

Its primary purpose was to “consolidate and amend” existing Acts, so as “to remove discrepancies prevailing amongst them and render their administration more even and secure.” But a secondary object was declared to be to “relieve minor industries from the pressure of legislation, and secure more independence for adult labour”—the Commissioners yielding on this point to the great mass of strenuous and well-organized evidence that was submitted to them. With this double objection in view a new nomenclature for Factories and Workshops

was introduced which has been practically adhered to since ,

The Act deals with five classes of works ¹ .

Textile Factories,
Non-Textile Factories,
Workshops,
Workshops in which neither children nor young persons
are employed,
Domestic Workshops

A " factory " is a place in which machinery is moved by the aid of steam, water, or other mechanical power , and factories are divided into two classes, Textile Factories and Non-Textile Factories, " these expressions being now first used in an Act of Parliament " The old term " which was originally defined to mean a place in which cotton, wool, etc , was operated upon by the aid of steam or water power , is retained for both, but as the regulations differ in some factories from those in others it has been necessary to use distinctive terms for the two classes."

The definition of a Textile Factory remains the same as under former Acts, and the regulations affecting them continue the same as to hours of work and meals, and education of children, lime-washing, holidays, etc In one or two particulars (however) the precise enactments of the old Acts were varied and made applicable to all factories, which variations will be noticed in their place.

The term " Non-Textile Factory " applies to the occupations enumerated in the Acts of 1864 and 1867, whether using power or not, and includes in addition all unnamed occupations in which mechanical power is used. This

¹ Abbreviated from *The Factory and Workshop Act*, 1878, by Alexander Redgrave, C B.—Introduction (Shaw and Sons, 1885).

definition " releases from the special factory regulations all those occupations which were (constituted) factories under the Factory Act, 1867 by reason of fifty persons being employed, and in which mechanical power is not used "

All the unnamed occupations in which power is not used, except those specially named in the Acts of 1864 and 1867, are defined as Workshops

In these the hours of work and meals, and education, are as strictly provided for as in Factories, but unless circumstances satisfy the Secretary of State that they are required, registers and certificates of fitness are not compulsory

The next class of works, to which fewer regulations apply, are the workshops in which none but women above the age of eighteen are employed

In these workshops the actual number of hours of work must be the same as in Non-Textile Factories, but with more elasticity of arrangement

The last class of works is designated " Domestic Workshop " These are Workshops in a private house, room, or place in which the only persons employed are members of the same family dwelling there.

In them the number of hours of work and of meals for children and young persons must be the same as in Non-Textile Factories, but with more elasticity of arrangement Education of children is the same The employment of women is unrestricted

But the Act leaves altogether free from control certain occupations of a light character when carried on in a dwelling-house by the family dwelling therein—viz

Straw-plait Making,
Pillow-lace Making,
Glove Making.

or others of a like nature to which a Secretary of State might extend this exemption.

It also exempts from regulation as to hours of labour and meals Flax Scutch Mills in which women only are employed intermittently and for not more than six months in the year

It further exempts "any handicraft exercised in a dwelling-house by the family dwelling there at irregular intervals and which does not furnish the whole or principal means of living to the family" that is, practically, what is known as "home work"

Finally, workshops in which men only are employed are entirely beyond its purview

"SWEATING"—The Factory Consolidation Act was a great boon to those who had the duty of administering the law and it removed several long-standing anomalies. Where it failed to give general satisfaction was in those carefully devised provisions for shielding adult labour from intrusion, which was also where it conflicted most with the needs and spirit of the time. Neither of themselves, nor in their relation to the development of any comprehensive scheme of protective labour legislation, were these successful. It will be remembered how the second Children's Employment Commission had reported very strongly on the evils pervading "domestic" industries¹ (p 90), and that it was the obvious intention of the Workshop Regulation Act to accord a protection to these similar to what had

¹ By these "domestic industries" must not be understood, of course, the Domestic System of industry, on the contrary they were mostly occupations which had passed from under the influence of that more archaic type of production and were exposed to the full force of competition, like factory labour. Hence the necessity of affording them the same protection.

been extended to the numerous works legislated for by the Factory Act of 1867. But defects in that Act itself (pp. 100, 101), and the unwillingness of local authorities to fulfil, in many cases, their obligations under it, had prevented the consummation. By now excepting altogether adult labour in domestic workshops from supervision the new Act took a long step backward in the same direction, and this action, combined with the old difficulty of the legal signification of the term workshop, went far towards placing a large class of helpless persons (equally the victims of competition with any employed in factories, and not organized for their own protection as factory operatives were) outside the pale of State concern. The natural result of this proceeding was a strong reaction against both the intentions of this statute and their faulty mode of fulfilment, an agitation was forthwith set on foot to bring such persons within the sphere of factory legislation too, and proceeding, as it is the nature of strong reactions to do, somewhat to extremes, enthusiastic reformers were soon found to propose not merely the wholesale extension of factory legislation to the home, but the utter abolition of home industry itself, and the forcing all persons working there out of their homes and into factories¹

A term which seemed to carry much weight in this discussion was the term “sweating” It is not a new one, and has been used with very varying meanings at various times. Mr Howell (*Conflicts of Capital and Labour*) uses it in connexion with the Spitalfield Acts (passed in the reign of George III.), leaving its meaning however unexplained.¹ In “Alton Locke,” the letters of “Parson Lot,” and the literature of that day, a rather more precise

¹ See also *Modern Factory System*, p. 279.

signification is assigned it¹ and now a whole host of new ones appeared, circling for a while round the notion that a "sweater" was a middleman, or agent, intermediate between the wholesale producer and retailer. Upon this functionary a great deal of honest indignation was for a while expended, till presently it was found that "sweating" is only "the undue advantage which is taken of labour in general," that "labour is liable to be sweated under any and every system of employment", is "a condition of industry under which workers are practically compelled to work at starvation wages for excessive hours and under insanitary conditions"²—with which discoveries its special economic significance may be said to have been disposed of. The time was ripe however for further action, and a Committee of the House of Lords having undertaken to investigate the matter, this was very thoroughly done, and a number of useful suggestions embodied in a subsequent Report. From the date (1888) when that Report appeared, and utterly dispelled the illusion that there was anything exceptional to investigate, the last shred of pretence that modern factory legislation is concerned more with con-

¹ The system so vigorously exposed in these publications was that according to which money was advanced to workmen, generally beyond what they could possibly repay, who were thus kept in perpetual bondage by the weight of undischarged debt. But the horrible condition of the work-rooms, and the resulting danger to the public are also properly stigmatized. As at the present time, it was tailors' work-rooms which incurred the heaviest condemnation.

² These quotations are from the writings of Mr Schloss who has done much to arouse public opinion on this matter. The conclusions of the House of Lord's Committee may be compared with them. Sweating, we are informed, for instance, is, "taking advantage of the necessities of the poorer and more helpless classes of workers," vol v, p 171. It is "Grinding the faces of the poor"—the still more compendious definition of Mr Arnold White.

centrated than isolated labour, or with one form or fibre of manufacture than another, ceased, it must be supposed, to operate, and its proper relation to industrial history was at length established. By devious paths, and through many involutions of form and phrase, it had forced its way to this recognition, till now it stood confessed (whether actually or potentially operative) the requisite economic counterpoise to the enormous evils of unlimited competition which inevitably accompany its splendid triumphs.

THE FACTORY ACTS, 1883 and 1889 —It now became the duty of the Executive to embody these conclusions in a statute, and much care and thought was expended on the task. Before proceeding to consider it, however, mention must be made of two short Acts passed in 1883 and 1889 respectively and less closely related to this main purpose. Both were principally sanitary in character. That of 1883 was chiefly concerned about White Lead Works, where much illness dependent on the manufacturing process had been found to prevail. It inaugurated the system of *Special Rules*, first devised for this industry alone but afterwards extended largely to others. These Rules, which were of a precautionary character, were to be promulgated under the authority of the Secretary of State and to have the full force of law. The rest of it was mostly taken up with legislation for bakehouses, and was notable for introducing a new category of workplaces—Retail Bakehouses. It was not otherwise important. The Act of 1889, afterwards amended in 1897 and since incorporated with existing law, applied exclusively to the production of artificial humidity in Cotton Cloth Factories with a view to its better regulation.

THE FACTORY ACT, 1891 —The echo of the "Sweating" agitation had not quite died away when the Home Secretary (Mr Matthews) was called upon to introduce the Bill for its nominal suppression which had been prepared meanwhile. But although the echo lingered, the substance had already been solemnly interred in the series of ponderous volumes containing the Report of that Commission,¹ which had elaborately considered the subject for some years only to find there had never been really anything exceptional to consider. It was considered clause by clause by a Grand Committee of the House of Commons, three competing Bills introduced into Parliament during the same session (1890) being withdrawn in its favour. When it emerged from the ordeal to which it was thus subjected it was found to be a good deal altered, the spirit of compromise (which is the characteristic spirit of all committees) having decidedly left its mark upon it. The result is contained in the Factory and Workshop Act, 1891 (54 & 55 Vic, c. 75), which abounds with novel features. This Act is divided into seven distinct parts, as follows —Sections 1 to 5 inclusive deal with *Sanitary Provisions*, 6 to 7 with *Safety*, 8 to 12, *Special Rules and Requirements*, 13 to 15, *Period of Employment*, 16, *Holidays*, 17 to 21 with *Conditions of Employment*, and sections 22 to 41 are headed *Miscellaneous*. The first part is the most characteristic. It hands over again to local authorities the sanitary inspection of workshops (which had been in the charge of the factory inspectors since 1871), reserving however to the latter the enforcement of the current law (Factory Act, 1878) as regards hours of labour and schooling. It retains intact the elaborate definitions of that Act recently quoted

¹ Report of the Commissioners to inquire into the Evils of the Sweating System

at some length Where a local authority becomes aware of the presence of any person in a workshop to whom the protective clauses apply the duty is cast upon it of reporting that circumstance to the factory inspector, and on the other hand, where a factory inspector receives notice of the opening of a new workshop it devolves on him to forward that notice to the local authority Thus a dual control is re-established, somewhat in the same spirit, though not after the same fashion, as under the Workshop Regulation Act. Provision is made (which was not the case before) for the contingency of these authorities not availing themselves of their powers, in which dilemma the Secretary of State may authorize factory inspectors to take steps for enforcing the law at their expense, and it is to be particularly observed that workshops include those "conducted on the system of not employing any child, young person, or woman therein," *i.e.* where adult men only are at work Under the categories *Safety*, and *Special Rules*, the requirements for fencing machinery are made more stringent, the Secretary of State (Home Secretary) is invested with large discretionary powers as to dangerous and unhealthy incidents of employment on the model of those provisions respecting White Lead Works passed in 1883 (p 117), and a new provision is enacted for providing means of escape from fire,—the enforcement of which is likewise in the hands of the local authority (in London of the County Council) *Period of Employment*, and *Holidays*, contain nothing of very great importance, but under the heading *Conditions of Employment* two considerable additions to previous legislation are made. The first is the prohibition on employers to employ women within four weeks after confinement, the second the raising the minimum age at which a child may be set to work from ten

to eleven years after 1st of January, 1893. These two provisions were inserted in accordance with resolutions passed at a labour conference held in Berlin at the instance of the Emperor of Germany in 1890. Among the *Miscellaneous* sections the most novel and important are the 24th and 27th. The first, known as the "Particulars Clause," lays the obligation on all occupiers of factories where payment is by the piece "to supply weavers in cotton, worsted, woollen, linen, or jute, and winders, weavers, and reelers in cotton, with particulars of the manufacture sufficient to enable them to ascertain the rate of wages at which they are entitled to be paid", the second requires lists of *outworkers* to be kept by every occupier and "contractor," where so ordered by a Secretary of State, "the same to be open to the inspection of any inspector of factories or officer of a sanitary authority". The purpose of these novel additions to factory legislation are too apparent to need description. They were sufficiently portentous, however, to merit something more than casual attention at the time of their enactment, and did so accordingly. What they seemed to forecast were great changes both in the incidence and administration of factory law, a wider scope of action and wider sphere of duty for it, and a more implicit and comprehensive usefulness than it had before had any pretension of attaining to.

THE FACTORY ACT, 1895.—Such forecasts were abundantly realized in the quickly following Factory Act of 1895. Political events conspired to cause this statute to be passed very hurriedly, and without that exhaustive discussion in Parliament which would undoubtedly have benefited it. It developed a step further some of the previous novelties, and initiated fresh ones of its own. It revised the regula-

tions relating to accidents and sanitation, still leaving the administration of the law as regards workshops primarily in the hands of local authorities. It extended the provisions of the Act of 1891 as to means of escape from fire, holding ~~the~~ occupier responsible for their observance, and it introduced several new categories of places partly within and partly without the full scope of factory law, and to which only certain of its provisions applied. These were, Laundries, Docks, Wharfs, Quays, and Warehouses, Buildings in course of construction where machinery is used, other buildings if 30 feet in height and under construction or repair by machinery, and finally, any building "in which twenty persons not being domestic servants are employed for wages." As these classes of places are obviously in quite an exceptional position they are dealt with in the next chapter. It also established a class of Tenement Factories and Workshops under somewhat complicated definitions. Statutory overtime work for women was shortened, and abolished altogether for young persons. Some novel provisions had to do with its relation to Shops. These are likewise dealt with subsequently (chap. vi.) It extended the system of Special Rules applied to certain industries, an important section (29) holding in addition "every medical practitioner" responsible for the notification of certain infectious illnesses occurring in a factory or workshop to the Chief Inspector. The provisions of the Cotton Cloth Factory Act of 1889 were extended to other textile factories where humidity was artificially produced. The requirement in respect of furnishing particulars of work and wages, hitherto confined to textile, was applied to some non-textile kinds of manufacture. Increased powers, such as those of permitting separate departments of work to be constituted in the same factory,

of declaring specified areas where work was in progress insanitary and therefore unfit for it, and of instituting further investigations into causes of accidents where thought desirable, were reserved to the Secretary of State, to be exercised at his discretion. An attempt to strengthen the provisions of the 1891 Act was made as regards the supervision of outworkers by requiring lists of these not only to be kept by the employer (as before) but to be sent twice a year to the Factory Inspector. Notice of occupation was made compulsory in workshops as well as factories. A statutory definition of overcrowding was afforded, namely 250 cubic feet of air to each worker when employed during ordinary working hours, and 400 when working overtime. The prohibition contained in the 1878 Act against cleaning machinery in motion was extended from children to young persons. Powers were conferred on Courts of Summary Jurisdiction to forbid the use of dangerous machines and injurious processes on complaint by an Inspector. Regulations for securing suitable temperature in factories and workshops and requiring Registers to be kept in both alike were enacted. Its general scope was to enlarge the area of supervision in the direction of a minuter inspection of processes and their environment, and by the inclusion of a quite new set of occupations. Meanwhile the hours of labour remained undisturbed, and the Normal Working Day—that ideal of early factory reformers—receded ever further into the background of statutory obligation.

THE FACTORY ACT, 1901.—The Act of 1901, which is now in force, and is the principal one, is mainly a supplement to the above. Its full title is “An Act to Consolidate with Amendments the Factory and Workshop Acts.” This consolidation is effected by repealing four preceding Factory

Acts (from 41 Vic , Cap 16 to 60 Vic., Cap 37) wholly, and two (54 Vic , Cap 75 and 58 Vic , Cap 37) in part, and by embodying, with a few changes, their principal provisions in a single statute. Its most distinctive feature is the concurrent jurisdiction that it confers on local authorities, impersonated by the District Council, with Home Office officials in many matters of inspection hitherto at issue between them. Other important alterations are the striking off one hour a week in textile factories (alone) by a further limitation of the hours of work on Saturday, the raising the minimum age of child labour from eleven to twelve years, and the further legalizing to a limited extent Christian labour on Sunday in the special industry of Creameries¹. Provision is made for the first time for securing the safety of steam boilers. The regulations pertaining to exceptionally dangerous occupations are revised and extended, so that in place of the earlier system of Special Rules, from which exception could be taken by those affected and arbitration called for, the Secretary of State may now draft Regulations of either a general or particular kind, subject to amendment or withdrawal at his own option, and to the approval of Parliament. The term "underground bakehouse" is defined, and the opportunities of work in such places are considerably curtailed. An effort is made to strengthen former requirements as to Home Work. Outworkers lists are to be sent to the District Council, and the description of places required to send such lists is extended. To the same bodies (in London the Court of Common Council) are relegated powers

¹ This had been hitherto forbidden in every industry but in blast furnaces, paper mills and perhaps laundries, except to Jews. Under Section 42 it is now permitted to women and young persons in this one for a period of three hours when necessary, independently of religious persuasion.

formerly exercised by the Factory Inspector in relation to sanitary matters, and in particular the inhibition of giving out articles of clothing to be made up or otherwise dealt with in places tainted with infectious disease. The duties formerly devolved on him as regards precautions against and means of escape in case of fire are likewise transferred to them. Additional requirements are enacted as to ventilation, temperature, and (for the first time) the drainage of floors, also as to overtime work, especially on perishable articles. Addition is made to the specified processes under which Docks come to be regarded as factories for certain purposes, and the supervision of private railway lines and sidings is added in this connexion. The requirement of giving particulars of work and wages to some workers is extended to some others, under conditions of increased stringency. Regulations as to keeping a general Register in factories and workshops are strengthened and enlarged. Electrical generating stations, and the occupations of Dry Cleaning, Carpet Beating, and Bottle Washing are included among protected processes.

The continued characteristics of these later Acts are thus still of a revolutionary kind. They mark a not only ever-widening aberration from the earlier statutory conception of a factory as before (p 117), but the inclusion under that term, or affiliation with it, of industries having no connexion now with factory labour at all. The introduction of such employments as Transport and Building is sufficiently startling. But certainly not less so are the elaborate provisions made for the supervision of home industry, whose obvious technical characteristic is that it not merely is not factory industry but is in fact its opposite¹. So singular a perversion of language needs perhaps some explanation. It will be found, we believe

(among more general ones that need not detain us), in two influences much operative in British law-making at this time. The first, is that inborn habit of compromise, of proceeding along the line of least resistance, of sacrificing logic to convenience, that our legists constantly display, the second a practice, much on the increase, of different Departments of State imposing through continuous enactments unrelated duties in one another. A political agitation becomes troublesome, or is very powerfully supported it must be capitulated to, or at the least compromised with. A long-neglected public need suddenly becomes prominent, and insurgent,—legislation must follow, however hastily applied. Thus the boundaries of this legislation are widened till the original shape is all but lost in the effort to accommodate the purposes of other statutes with it, or the shape and even the name remain while elder sanctions and limitations are ignored.

CHAPTER VI

CONCLUDING CHAPTER

COGNATE AND OTHER INDUSTRIES — CHIMNEY SWEEPS —
MINES AND QUARRIES — ALKALI WORKS — EXPLOSIVES —
CANAL BOATS — BAKEHOUSES — SHOPS — LAUNDRIES
—TRANSPORT — WAREHOUSES — BUILDING — PROTECTION
AND EMPLOYMENT OF CHILDREN ACTS — TRUCK — UN-
REGULATED OCCUPATIONS — AGRICULTURE — DOMESTIC
SERVICE—HOME WORK—CASUAL AND VAGRANT LABOUR—
LITERARY AND ARTISTIC INDUSTRY

COGNATE AND OTHER INDUSTRIES —We have now passed in review the course of English factory legislation from its crude beginning in 1802 to the precise provisions and wide-spreading applications of the present day. But besides the laws dealing thus with factories and workshops, as therein defined, several of a cognate kind are found on the statute-book, some more, some less closely related to them, some affiliated, and some not, some merely tracing their origin to the same source, in the democratic and sympathetic tendency of modern thought acting as a corrective to a purely economic conception of the purpose of industry, some taking very various shapes, some actually though partially embodied in the above.

CHIMNEY SWEEPS — The earliest of these, belonging to the last category but one, and interesting as the immediate precursor of the whole body are the curious

series of enactments relating to the somewhat obscure calling of chimney-sweeping. From about the middle of last century the public conscience seems to have been considerably stirred on this subject, and in 1760 a letter appeared in *The Public Advertiser* drawing attention to the hardships endured by child sweeps, and suggesting, in particular, that they should not be allowed to go about their business without proper covering¹ In 1773, a committee of philanthropic persons was formed in London to endeavour by voluntary action to procure some alleviation of their position, and eleven years later Mr Jonas Hanway, then a member of the House of Commons, published a pamphlet about them, under the rather ponderous title as follows. "*A Sentimental History of Chimney Sweepers in London and Westminster, showing the Necessity of putting them under Regulation to prevent the grossest Inhumanity to the Climbing Boys*" Voluntary action being found, as in so many similar cases, of little value, an Act of Parliament was passed in 1788 (28 Geo. III, c. 48) forbidding master sweeps to keep more than six apprentices, or take them under eight years of age—which was all the relief (says Lord Shaftesbury's biographer) "that could be wrung from Parliament for nearly fifty years." Attempts made subsequently to obtain further legislation failed, and in 1807 the whole subject was referred to a Select Committee of the House of Commons for investigation, which took abundant evidence, after the familiar manner of such bodies. The report of this Committee (adds the above authority) "is a record of sickening horrors" "It reveals how children of a suitable size were stolen for the purpose, sold by their parents, inveigled from workhouses, or apprenticed by Poor Law Guardians, and forced up narrow chimneys by cruel blows,

¹ *Life of Lord Shaftesbury*, vol. i., p. 295.

by pricking the soles of the feet, or by applying wisps of lighted straw." These atrocities, and many more which were brought to light, excited much indignation. They formed the subject of a well-known article by Sydney Smith in *The Edinburgh Review*, and another attempt was made to extend the utility of the Act of 1788. But this Bill was thrown out by the House of Lords, and it was not till 1834 that any efficient protection was afforded at length to the little victims. By an Act passed in that year (4 and 5 Will IV, c 35) it was made a misdemeanour to send a child *up a chimney on fire*¹, and in two subsequent ones (3 and 4 Vic, c 94, and 27 and 28 Vic, c 37) a reasonable amount of security was at length procured for them, the process being much aided by the invention of a machine that practically supplanted human labour in sweeping. Nevertheless, further legislation was undertaken in 1864 and again in 1894, but it was of trifling importance, the prime need for such having then ceased.

. MINES and QUARRIES.—The position of mines and quarries in this connexion is a peculiar one. The relation of the extractive² to the manufacturing industries has been always one of the moot points in protective labour legislation, which displays accordingly some uncertainty in dealing with those places. Mining is a process of industry conducted on a system similar to the Factory System—that is to say it is performed by a body of congregated labourers assembled for the purpose within a place of more or less definite bounds. But mines are not included under the

¹ *Life of Lord Shaftesbury*, vol i, p. 296

² M. de Laveleye points out how "the manufacturing industries receive from the extractive and agriculture their raw material, and give them the final form demanded by consumption."—*Elements of Political Economy* (Chapman and Hall, 1884).

Factory Acts, "because they appertain to the soil, which is not one of the materials of wealth, but one of its sources, the source in fact from which all the materials spring"¹, they are provided for by special enactments. This is not, however, the case with quarries. They are included (41 Vic, c 16, sec 93, and Sch IV, Part II), and are classed as factories or workshops according to the usual method of creating that distinction, namely as to whether manual power only, or other motive power as well is made use of about them. A similar classification is applied to "Pit Banks", that is "any place above ground adjacent to a shaft of a mine in which place the employment of women is not regulated by any of the Mines Acts". These are either Non-Textile Factories or Workshops. Points of resemblance and distinction in cognate processes of production are here very close indeed, and the exceeding difficulty of a precise classification of industries is well exemplified by the example.

The special legislation affecting labour in Mines has been already mentioned. The first Mines Act was passed in 1842, and in 1850 and 1855 respectively two supplementary ones, 13 and 14 Vic, c 100, and 18 and 19 Vic., c 108. These applied exclusively to coal mines. In 1860, and again in 1872, new and far more comprehensive legislation was initiated, embracing in the first instance iron—and in the last all metalliferous mines. Under it, elaborate codes of regulations are provided, inferior only to the regulations of Factory Acts in respect to the younger age at which a child is permitted to work underground, and the less stringent quality of educational and physical².

¹ *Introduction to a History of the Factory System* p 31

² A young person employed in a mine does not require a surgical certificate of fitness as is the case in a factory.

requirements while doing so, but displaying much care and forethought in other ways. More recent legislation has supplemented and is still supplementing these requirements in a still more stringent manner.

The law in respect to quarries is regulated by the Quarries Act, 1894 (57 & 58 Vic, c 42), under which Inspectors of Mines have jurisdiction over these and adjacent works, which would otherwise be under the Factory Act, provided the quarry is over twenty feet deep in any part. If of that or less than that depth they come under the supervision of the Factory Inspector. This Act applies to "any place, not being a mine, in which persons work in getting slate, stone, coprolites or other minerals." When under the Factory Act they are classed as either Non-Textile Factories or Workshops according to the motive power employed.

ALKALI WORKS—The manufacture of chemicals is another instance of a cognate process of industry which stands in a peculiar relation to the Factory Acts. Dr Ure (*Philosophy of Manufactures*, p 2) distinguishes between a chemical and mechanical manufacture in these terms: "A mechanical manufacture, being commonly occupied with one substance which it conducts through metamorphoses in regular succession, may be made nearly automatic; whereas a chemical manufacture depends on the play of delicate affinities between two or more substances." Accordingly, legislation in regard to such places, grouped under the general term Alkali Works, is somewhat complicated. Some special statutes regulate their conduct in the chemical connexion, and are concerned with details of manufacture, and in particular with the exhalation of noxious gases, while for all general labour purposes they are not merely affiliated to, or cognate

with, the Factory Acts but actually under their control. Only, there is this further peculiarity that as Alkali Works they are within the jurisdiction of the Board of Trade, but as factories of the Home Office

EXPLOSIVES—Places where explosive substances are manufactured are in much the same position, with a special and a general set of rules of which the current Factory Act regulations form one, but in this case both sets are administered by Home Office officials

CANAL BOATS—An Act affecting life in canal boats, and supplementing an earlier one (1877), was passed in 1884, but is very remotely connected with factory legislation, being affiliated rather to the Public Health and Education Acts. It is pleasant to learn that it has been very successful in its object. Its enforcement is committed to the Board of Trade.

BAKEHOUSES—Legislation for bakehouses has pursued a somewhat erratic course. With the exception of two comparatively unimportant enactments, passed in 1822 and 1835 respectively, they were brought under inspection for the first time by the Bakehouse Act, 1863 (26 and 27 Vic., c. 40), the duty of supervision being then assigned to local authorities, and were specially excepted from both the Factory and Workshop Acts of 1867. In the Factory Act of 1878 they were, on the contrary, specially included (Sec. 93, and Sch. IV., Part II.); being defined in the extensive terms, "any places in which are baked bread, biscuits, or confectionery, from the baking or selling of which a profit is derived." But the operation of this law was practically limited to places having over 5000 inhabitants (secs. 34, 35). The Factory Act of 1883 introduced next a novel distinction (not known to any of the

other subjects of factory legislation) between retail and wholesale bakeries, the sanitary inspection of the former (but not latter) being retransferred to local authorities, while for other purposes of inspection they remained as before. By the Factory Act of 1891 their sanitary supervision was left in the same hands where they are not "Factory Bakehouses," *i.e.* employing foreign motive power, in which latter case they come under the general law. Where the labour is still all manual they are (whether wholesale or retail) in the position now common to workshops, that is local authorities are responsible for their sanitary condition in the first instance, but the factory inspectors are charged with the enforcement of the other provisions of the law where they apply.

In 1895 the limitation to places of 5000 inhabitants was abandoned, and further sanitary requirements enacted, and by the same statute Underground Bakehouses were first definitely legislated against—so far at least as this series of laws is concerned. Their use was wholly prohibited "unless so used at the passage of the Act", thus providing for their gradual extinction. In 1901 they were specifically defined (sec 101, (3)), and some very elaborate regulations made concerning them. According to these they are to be either factories or workshops as judged by the usual accepted criteria. In that regard, and are to be inspected by the officers of the Factory Department or District Council as they come into the one or the other category. But in the case of retail bake-houses underground the law is to be enforced by the Councils only. which have also the special duty of granting certificates of suitability to all or any and the power of prosecuting in default. In practice the kitchens of restaurants and hotels are exempt from control (though apparently fulfilling

the statutory definition), while those of confectionery shops where goods are sold over the counter, or are sent out, are subject to it

SHOPS —Of all cognate occupations to those carried on in factories or workshops that carried on in establishments where goods are offered for sale remains in the least satisfactory condition, whether judged by the constant agitation that is kept up about it, by the provision that has been made for it, or by the actual results achieved. This is the more strange considering the unusual amount of public attention that has been attracted to the subject, and the length of time during which it has been a matter of debate. It is notable, too, in connexion with the original commercial signification of the term factory, which meant, we know, less a place of production than exchange (p 1). The excuse that shops are not manufacturing establishments does not suffice to account for this exceptional position, for *manufacture* in the popular sense has been given up as a sanction for factory legislation since 1864. Is it then that the labour carried on in them is not material industry, such as the Workshop Act, for instance, requires (p 102), or productive, such as in the more general sense the genius of factory legislation is concerned about (chap. 11) ? But it is clearly both. In the view of the most orthodox school of economists the operation of production is not completed until the produced commodity is in the hands of the consumer (*Principles of Political Economy*, by John Stuart Mill, vol 1, etc ¹), and there is no doubt

¹ In his interesting book, *The Unseen Foundations of Society*, the late Duke of Argyll insists on this point with characteristic vigour "Distribution," he says, "is not a separate and co-equal work with that which is called Production. Distribution is merely one of the provinces of Production" (p 457).

at all events about the material character of the transaction. Or, parting from these more technical conceptions, and taking a popular view are the incidents of shop work of a kind to call for exterior regulation, like those of the many places now called factories —is labour there exposed to the ordeal of unlimited competition and the other influences distinctive of the modern industrial revolution? It is so certainly. It is even exposed to those influences in a special degree, the conditions of shop labour having been often shown to be as hard in certain particulars as they were ever shown to be in factories and workshops¹. Are the subjects of legislation the same? The very same—women, children, and young persons in the first instance, men later. Any special difficulties of inspection? None whatever, shops are open to the view, and can always be approached with ease while work is going on in them, factories and workshops are more difficult of access. Are they not included, then, in factory legislation? No, there are some imperfect requirements about them, but every effort to include them absolutely has failed, and they are regulated at present by a law which, though cognate with, is not more than partially affiliated to factory law, and has but a poor resemblance to it. The history of this anomaly is of sufficient interest to be pursued at some length.

As early as 1821 mention is made of an appeal emanating from shop assistants against “immoderately long hours of business”, and already in 1842 an association, “The Metropolitan Drapers’ Association,” was formed for agitating the subject. This, the first of a long series of others, was an association for voluntary action. Several attempts

¹ See *Death and Disease behind the Counter*, by Thomas Sutherland (Kegan, Paul and Co., 1884), where ample details are given.

were made thereafter to bring the matters at issue before Parliament, and at length in 1873 Sir John Lubbock introduced a Bill into the House of Commons proposing to extend certain provisions of the current Factory Acts to shops. Though these Acts had already made great progress this Bill met with but scant encouragement, factory reform being just then in the midst of that strong individualists reaction which was so ably worked by the "women's rights" party. The debate served, however, to give point and consistency to the campaign outside, which was now proceeding vigorously, principally under the auspices of the Early Closing Association and Shop Assistants' Labour League, the former of these societies favouring exclusively voluntary action, the latter seeking legislation. In 1883 Lord Stanhope introduced a Bill on the subject into the House of Lords. Its purport, like that of Sir John Lubbock's, was to place shops under the Factory Act, but it was imperfectly drawn, and, after a very sympathetic debate, was not proceeded with. The next effort was made again in the House of Commons. In 1886 a Shop Bill was introduced which dealt exclusively with young persons (*i.e.* "of the age of thirteen and under the age of eighteen") who were not to work "for a longer period than twelve hours in any one day"—*shop* being defined (*sec. vi*) to "include retail and wholesale shops, and warehouses, in which assistants are employed for hire," but not refreshment houses of any kind. This measure was referred to a Select Committee, and presently resulted in an Act of Parliament, the first on this subject ever actually passed (49 & 50 Vic., c. 55). In this statute some remarkable alterations of current procedure occur. It applied only to young persons, which in this case meant *any* persons under the age of eighteen who were not to be employed in or about a

shop for a longer period than seventy-four hours a week, including meal-times, the definition of *shop* now embracing "markets, stalls," and "licensed public-houses and refreshment-rooms of any kind" Thus the novel principle of a weekly, instead of daily, criterion of work was legalized, a child of any age might apparently be employed for seventy-four hours at a stretch, and women, contrary to the analogy of all cognate legislation and to the principal object which reformers had in view, were shut out from the benefit of the law This Act failed of effect owing to the absence of any proper provision for its enforcement, and remained inoperative up to 1892, when an amending Act was carried giving powers to local authorities to put it in operation This was done to some extent From a Parliamentary Return issued in the early part of 1893 we learn the upshot It appeared that seventy-one inspectors had been appointed in England and Wales, fifty-six of these by Town Councils, five by the London County Council, and ten by other County Councils. In Scotland eighteen Town Councils and one County Council had made appointments No appointments had been made in Ireland Later information concerning results is found in the annual report of the London County Council for June 1893 In the metropolis "By the end of March 1893, a number of complaints had been received and investigated, but only in twenty-three cases had infringements of the Act been committed In four of these, legal proceedings were taken and penalties imposed, and in the remainder the offenders were cautioned More than one-third of the infringements were at the premises of hair-dressers!"

It is no wonder that after so poor a result agitation was renewed, and that subsequent years have had the ad-

vantage of something like an annual Shop Bill brought forward for consideration. A very important one is under consideration now¹. The difficulty of course is to suit the varying needs both of varying customers and of varying localities. It is impossible to organize shop labour in precisely the same way as factory labour, where commodities are exchanged in the bulk and by eventual not immediate sale. Equally is it a difficulty almost insurmountable to say at what precise point (as we have seen)² the distribution of goods differs from their production, or to prevent those processes occasionally merging into one another, even when they are, or either of them is, specifically defined. It is at this point, however, that the current factory law makes a supreme effort for labour in shops. Under the Factory Act of 1901 it is illegal to employ a young person or woman both in a factory (or workshop) and in a shop on the same day for a longer period taken together than would be legal in the factory or workshop taken alone, and the time of employment must be stated on a Notice affixed there. The difficulty of enforcing this provision is obvious, and it may be doubted if under a divided method of inspection it is, or ever can be, properly enforced.

A later statute (4 Edw. VII., Cap. 103) deals exclusively with the closing of shops for a weekly half-holiday—which is practically left to local option to arrange, and an earlier one, the “Seats for Shop Assistants Act” (1899), requires that seats for such be provided in the proportion of “not less than one seat to every three female assistants employed in each room”.

LAUNDRIES—Laundries occupy an anomalous position in the general scheme of philanthropic endeavour which has issued in these and kindred laws. Great efforts were

¹ 1911.

² P. 133.

made to include them in the Factory Act of 1878, but the opposition was too strong. The technical difficulty was as to whether the process performed in such places could be construed to be a "manufacturing process," *i.e.* "altering, adapting, or finishing any article *for sale*", but the plea was also advanced of the exceptionally *domestic* character of the occupation, and the hardship to women in particular of any statutory curtailment of working hours. With regard to the first contention, the difficulty is one common to a large proportion of the subjects of factory legislation, and with regard to the second, it is a plea more often heard now on the opposite side of the argument—as a reason rather for restriction, and they found admission, accordingly, into the statute of 1891 (re-enacted in 1901 and subsequently amended by that of 1907), though in a qualified way.

The present position is the following. Steam laundries (a continually expanding feature in this industry) are factories if the goods made up there are provided for sale, otherwise they are not, while laundries attached to manufacturing establishments, hotels, public baths, and even charitable institutions¹ are either factories or workshops on the usual grounds. But laundries where the work is all manual and the articles are provided for *use* not sale, are amenable to factory law only in respect to their sanitary conditions, and then only where a Secretary of State is pleased to make a special order on the subject (54 & 55 Vic, c 75, sec 1.). Many privileges also are allowed to them as regards hours of work and holidays that are not allowed to factories.

TRANSPORT—The process of carrying a commodity about from place to place is not an incident of its manu-

¹ 7 Edw VII, cap 39.

facture Neither is it necessarily distribution, nor exchange. It is dispersion, which when organized becomes Trade, and on a large scale Commerce. That department of industry was accordingly until quite recently held to be obviously outside the scope of factory law. It was not of course outside the scope of other labour regulating legislation. There were several statutes already dealing with it, as *e.g.* the Railway Acts, Merchant Shipping Acts, Canal Boats Act, and the like, administered by the Board of Trade, not to mention much various and varying supervision supplied by local and municipal authorities and the Education and Local Government Boards. But under the Factory Act of 1901 the novel step was taken of including portions of railroads among premises subject to its control for a limited number of purposes. These purposes include regulations as to accidents, and as to dangerous processes and machinery, but not to hours of labour, holidays, or general sanitation. The step itself was taken in view apparently of certain provisions of the Railway Employment (Prevention of Accidents) Act 1900 which had deliberately excluded such purposes from its purview, and it forms accordingly an excellent illustration of that new policy in regard to factory legislation to which allusion has recently been made¹. The parts of railways so included are "any line or siding within the meaning of the above Act used in connexion with a factory or workshop or with any place to which any of the provisions of this Act apply" (1 Edw VII, cap. 22, sec 107), and "if any such line or siding is used in connexion with more than one factory or workshop belonging to different occupiers the foregoing provisions shall have effect as if this line or siding were a separate factory."

¹ *Ante*, p 123.

The same Act extended the provisions already applied to docks, wharfs and quays by the earlier one of 1895. That earlier Act had recited as needing protection "every dock, wharf, quay, and warehouse, and, so far as relates to the process of loading or unloading therefrom or thereto, all machinery and plant used in that process" Difficulties having arisen, however, as to the application of the Workmen's Compensation Act in certain cases, and as to the meaning of the words "therefrom and thereto," those words were now omitted, and "all machinery or plant used in the process of loading or unloading or coaling any ship in any dock, harbour or canal" substituted. "Plant" is defined as "any gangway or ladder used by any person employed to load or unload or coal a ship", and "ship" and "harbour" have the same meaning as under the Merchant Shipping Act, 1894.

The parts of factory legislation that apply to such places are (1) Power to make orders as to dangerous machines. (2) All the provisions relating to accidents (3) Regulations for dangerous trades (4) Regulations as to power of inspectors. (5) Regulations as to fines in cases of death or injury.

WAREHOUSES —If the carrying a thing about from place to place is not a process of manufacture, still less, it might be thought, is the putting it away so—its *storage* in short Nevertheless, under the Factory Acts of 1895 and 1901, Warehouses are constituted factories for certain purposes On a first reading of this enactment it might be supposed that the warehouses referred to were only those adjacent to the docks, wharfs, etc., mentioned; for the term itself follows closely on these in the same sentence as if necessarily connected with them (1 Edw. VII.,

cap. 22, sec 104) But the Court of Appeal has established the contrary. A warehouse in the technology of factory legislation is to be understood, it has decided, "in its dictionary sense," as "a place where wares are stored," without reference to its contiguity to water, railroads, or any particular means of transit. How wide an interpretation this is, and how far from any of the early ideals of what might constitute a factory will be evident on the least reflection and need not be insisted on here. Moreover, if a warehouse why not a shop? Nearly every shop, certainly every large shop, has a warehouse attached to it, nay *is itself* a warehouse under this definition. Each evening that a shop assistant puts away wares that have been exposed for sale during the day he *stores* them. But further, there is already another well-understood meaning of the term, one also that has been recognized in Orders of the Secretary of State as applying to parts of a recognized factory or workshop.¹ There certainly seems to be some confusion here that subsequent legislation will perhaps rectify.

BUILDING.—A still more remarkable advance, from a purely technical point of view, is made in the inclusion of building operations among those operations of industry for which protection is claimed by modern factory law. A building is not in any sense a commodity, it is not a thing that can be handed about and passed from place to place, nor is it necessarily a place where any commodity is thus dealt with, or is made, or is stored afterwards. True, shipbuilding had been included since 1867, but a ship *is a* commodity, capable of transference from place to place, and distinctly a manufactured article. On the other hand,

¹ Places where persons are "solely employed in polishing, cleaning, wrapping or packing up goods" (1 Edw VII, cap 22, 2nd Sch. (4))

why should not operatives engaged in building a house be as well cared for as operatives engaged in building a ship ? They are both wage-earners, and liable to the same competition in wage-earning, the scaffolding and machinery employed about the construction of either edifice, as probably about as dangerous as that employed about the other. These are the compelling arguments nowadays and not the desire to adhere to exact formula. Accordingly, building too was legislated for at the same time as docks, wharfs, quays and warehouses, and with the same purposes in view. Those purposes apply in this case "as if any premises on which machinery worked by steam, water, or other mechanical power is temporarily used for the purpose of the construction of a building or any structural work in connexion with a building were included in the word factory, and the purpose for which the machinery is used were a manufacturing process, and as if the person who by himself, his agents, or workmen, temporarily uses any such machinery for the before-mentioned purpose were the occupier of the said premises." Further, even where no machinery is employed, the parts of the law concerning the notice and investigation of accidents still apply to (a) "any building which exceeds thirty feet in height and which is being constructed or repaired by means of a scaffolding"; and (b) "any building which exceeds thirty feet in height and in which more than twenty persons, not being domestic servants, are employed for wages", and (further) "as if, in the first case, the employer of the persons engaged in the construction or repair, and, in the second case, the occupier of the building were the occupier of a factory."

The pressure of conterminous legislation; in this case once again of the Workmen's Compensation Act;

may easily be recognized in the framing of these definitions

PROTECTION AND EMPLOYMENT OF CHILDREN ACTS — A large number of Acts relating to the protection and employment of children generally has been passed in recent years which are only connected with factory legislation in respect of a few special enactments, and in so far as the factory inspectors have certain delegated powers under them. These statutes, the earlier of which had to do principally with the employment of children in theatres and in dangerous performances, culminated in 1908 in one very important one (8 Ed. VII, c 67), affectionately named "The Children's Charter." The principal provisions of these directly affecting factory legislation are those contained in the Act of 1903, subsequently embodied in it. They forbid the employment of a child in any protected labour later than 9 P.M. and earlier than 6 A.M., and "no child who is employed half time under the Factory and Workshop Act shall be employed in any other occupation" (3 Edw VII., c 45, sec. 3). Powers are likewise given to local authorities to make bye-laws prescribing the age below which employment of children is illegal computed *weekly*, and finally some ill-defined responsibility is cast upon the factory inspector in regard to theatrical entertainments.

TRUCK —An instance of legislation not of a cognate kind with factory legislation, and yet affiliated to it, is found in the Truck Acts (42 Will. IV., c. 37 to 59, and 60 Vic, c 44). The primary object of these Acts is "to prohibit the payment in certain trades of wages in goods, or otherwise than in the current coin of the realm". a purpose of legislation

which dates back to the reign of George II. But their later object is the prevention of unreasonable deductions from the wages of workers by means of fines. The Act of 1831 applied only to workmen employed in particular occupations specified therein. A second Act (1887) extended this protection to all workpeople employed in manual labour, except domestic servants, and included (sec. 10) even one who should work "at his own house, or otherwise, without the employment of any person under him except a member of his own family"—a class specifically excluded from the operation of the Factory Acts. The third one (1896) elaborately regulates the amount which may be deducted from a workman by an employer for (*a*) fines, (*b*) spoilt goods and (*c*) materials used for manufacture. Thus fines may only be imposed when definite damage has been caused and when they are in conformity with a contract mutually agreed upon between employer and employed, and on each occasion when they are so inflicted the amount and the nature of the damage must be stated. These requirements apply also to shop assistants. The same rules are valid for deductions for bad or negligent work, and, in addition, such deductions must be "fair and reasonable." The like apply also to deductions for *materials* or *tools* supplied by the employer, and any payments made to him for these must not exceed their actual net cost. The Acts are administered by the officers of the Factory Department so far as factories, workshops, laundries and places to which work is given out from any of these are concerned, and in mines by the Inspectors of Mines. Finally the Home Secretary has power to exempt any class of persons from the latter provisions, and has in fact exempted from them the cotton weavers of Lancashire, Cheshire, Derbyshire, and part of Yorkshire.

Here then we have legislation not of a cognate kind affiliated to factory legislation, as before we had (in the case of shops for instance) a cognate industry excluded from its sphere. We have had in several recorded instances (as *eg* quarries, chemical works and bakehouses) a mixed jurisdiction in operation. We have had the inclusion of unlike industries (as those concerned about buildings, railways, wharfs), and now at length even the industry of the home is brought within it. Throughout all those changes, and within an ever-widening sphere of action partly still in contemplation but partly also actually in force the same connexion with factory legislation is sought to be maintained, but it is with decreasing energy as the new projects pass far beyond its proper purposes into other fields of social amelioration, and as new conceptions of the functions and duties of the State emerge. The moral of all these vagaries is clear, and is that which has been preached throughout this volume. The principle of factory legislation as now conceived of is so far from being conterminous with the Factory System that it is related to it in an almost purely historical connexion (p. 31). Neither derivatively, nor scientifically, nor historically, is a factory anything other than it may at any moment be legally defined to be, nor has factory law any more specific meaning than a law to protect the industrially weak against the industrially strong—it its utility be eventually allowed to end even there. Conceived of, and first enacted, at a great crisis, and during a period of unparalleled changes in industrial methods, the Factory Acts have slipped into the position formerly filled by other regulations instituted with a like purpose, and whether further extensions of them (already contemplated or not yet thought of) are to come, and if they come, whether it will be by actual

expansion, by lateral extension, or parallel action, whether the title thus acquired is to still remain distinctive of the whole aggregated mass of laws, or not, these are matters of comparatively small account. The great fact is that they are here, doing a recognized amount of good, mollifying, throughout an ever-extending area, the purely material ideals of competitive labour, and susceptible always of further improvement.

Before passing from the subject it should be noted that legislation is here concerned with adult male equally with juvenile and female labour, and also that the Truck Acts are only of partial operation, applying that is, "in certain trades."

UNREGULATED OCCUPATIONS—It might well seem after this long list of instances that we had pretty well-nigh exhausted all possible subjects of factory and kindred legislation, but such is very far from being the case. It is so far, indeed, from being so that possibly as much labour still remains unregulated in this country as has ever yet been brought under any special form of State control. Passing by the learned professions, and most departments of the Public Service—the latter of which are, however, so controlled though in a different sense—omitting even the difficult and as yet unsolved problem of the position to be ultimately assigned to immaterial products (to which a few words will be devoted afterwards), numerous important industries more or less engaged about wealth production still remain to which nevertheless no cognate system of supervision applies.

AGRICULTURE.—The most notable of these industries is the oldest and most important of all—Agriculture. The

statutory definition of a workshop—"Any place whatever, *whether in the open air or under cover*, in which any handicraft is carried on"—might, by a not very strained construction, have been understood as covering this employment,* but it has not been so construed and was not so meant. Agriculture formed, however, one of the subjects of inquiry of that most exhaustive of all public inquiries, the second Children's Employment Commission, and from the period of the publication of its Report, attempts, more or less sincere, were made from time to time to secure for it benefits similar to those conferred by the Factory Acts. The powerful opposition of the land-owning class, united—it must in justice be said—to the peculiar difficulties of the case, deferred for a long while any practical result. "The labourer in the fields," the present writer has said elsewhere,¹ "is both naturally and historically, as well as economically and actually, a person occupying a very different position in the body-politic from the labourer in the factory or the forge . . . 'The kindly fruits of the earth,' which are his especial care, are such as are only to be enjoyed in 'due time', they are not the products of merely mechanical appliances set in motion by an unintelligent force acting with undeviating regularity"—nor capable, it should be added, of practically indefinite increase on the same area of cultivation. At length a veritable statute, *The Agricultural Children's Act*, 1873 (36 & 37 Vic, c. 67), did indeed appear, but so mutilated in its parts, and of such poor construction, as to be quite useless. The principal provisions of this Act were the following.—No child under eight years of age was to be employed in any kind of agricultural work, "except by

¹ Articles in *Fraser's Magazine* for May 1876, "The Agricultural Children's Act."

his parent on land of his own occupation." Between that age and ten years, not to be employed unless 250 attendances had been made at school within twelve months next preceding, or 150 between ten and twelve years ; but a child who had passed Standard IV. of the Education Code was to be exempt from all restrictions. A parent is defined as " the parent, guardian, or person who is liable to maintain or has the actual custody or control over any child " No provision is made for enforcing the Act, nor even putting it in operation. But any Court of Summary Jurisdiction is invested with the power of suspending it. It is clear that such a statute was of no practical usefulness , it never was enforced , and to this hour there is no law dealing with agricultural labour in the manner that manufacturing labour is dealt with by the Factory and kindred Acts.¹

DOMESTIC SERVICE.—The great occupation of domestic service is wholly unregulated by any law similar to the Factory Acts. This also presents the appearance of an anomaly when we reflect how shockingly some servants—people for the most part of the kind and class for which this legislation is in other cases provided—are overworked . women and young persons in lodging-houses, for example, and in hotels and refreshment-rooms . Yet it would certainly seem a somewhat extravagant straining of even the elastic term factory labour to expand it so as to include domestic service . Not that such action would be quite unprecedented. Ever since 1864, when certain selected employments not before recognized as factory employments

¹ The Agricultural Gangs Act (1867) is no exception, for it deals with the labour question in a quite different manner. Moreover, it is now obsolete.

were so designated, and still more since 1867, when their number was greatly increased, the way has been open. Its actual consummation has been even approached already. It is an open question if a woman making pastry in a hotel might not with propriety claim the protection of the Factory and Workshop Act, 1878 (41 Vic, c. xvi, sec. 93 and Sch. IV, Part II), and all persons living in the house with their employers and giving assistance, now in one direction, now in another, are little distinguishable from servants, or at all events it is not easy to know where to draw the line. Apprentices in some sort are, and have always been, in this position, and it was apprenticed labour that was first legislated for. Nor has the class in question been itself inarticulate on the matter. At Trades Union Congresses, held at Liverpool and Dundee respectively, the subject was mooted, and more lately a Bill was prepared to be laid before Parliament in which redress of grievances was sought for one particularly hardly used class of domestic servants—barmaids. The whole subject is full of difficulty, of increasing difficulty too in view of changes (possibly not remote) which would bring the full force of the Industrial Revolution to bear in this arena, which it has as yet been slow to enter. In such an event readjustments unfailingly characteristic of its presence elsewhere should be expected. "Servants will become more of the nature of temporary helpers in the home, like shop attendants, their duties more definite, and their interest in the general concerns of the household more remote. It is even possible to anticipate a time when they will cease to live in their master's houses, or to work in them beyond a stipulated time each day"¹ a practice not uncommon in new countries now. Should that time come, might they not fairly claim to be

¹ *Modern Factory System*, p. 455.

treated as those same shop assistants will probably then be, and as the statutory objects of factory legislation now are ; and would it not be difficult to resist the claim ? Possibly so ; but that time is not yet In the meanwhile their labour is on a different plane, it seems to us, from that of the factory and workshop (as either legally or popularly understood), which is the immediately important matter " A servant enters your employment under ordinary circumstances to *wait upon you*, not to perform any specific act, and the contract between you is distinctly made on that basis Moreover, there is an unwritten code of custom in domestic service which has all the force of law, and is, indeed, enforced by it in extreme instances—which is no longer the case in industrial employment " Furthermore, and this is an important point, " this class of persons is not (on the whole) in the condition that calls for interference ; they are not helpless nor the subjects of economic tyranny, but, on the contrary, have very much the control of the market themselves, the demand for them (for capable ones) being perennially in excess of the supply." They have also, it may be noted, the protection of the Common Law in the last resort, and of a special statute (*The Master and Servants Act*) , " and it is ever to be remembered that Common Law in this country has constantly and beneficently interfered between masters and servants in the domestic sphere while it has resolutely held aloof from interference in the industrial " ¹ When these facts are borne in mind the presupposed anomaly will not perhaps appear so great, even if it does not wholly disappear.

HOME WORK.—The definition of a " workshop," as a place " to and over which the employer of the persons

¹ *Modern Factory System*, p. 454.

there has the right of access or control" was deliberately framed to except a large body of industry from supervision, and failed on the whole of that effect. But besides this general exception, there are special exceptions in the Factory Acts applicable to other specific descriptions of workshops, that are still valid, as well as numerous modifications of them, whose purpose is principally to limit the requirement of a normal working day. There is also a particular exemption (sec 114) for "The exercise in a private house or private room, by the family dwelling therein, or by any of them, of manual labour for the purposes of gain . . . where the labour is exercised at irregular intervals, and does not furnish the whole or principal means of living to such family", and the following occupations are mentioned by name as specially excepted—viz straw plaiting, pillow-lace making, and glove making. Lastly, there is the exemption (from all but sanitary provisions) of adult male labourers, whether working as above or even in workshops away from home, provided no regularly protected people work with them.

Here then is a vast and very varied body of employment not under the cognizance of factory inspecting officials, though in all respects, except in respect to the place where it occurs, of a similar kind to much that is so. It will be seen also that this body of labour may be conveniently divided into two parts, that furnished by adult males, and by all other persons. The former, too, need not necessarily be labour at home, it may be labour performed either there or elsewhere. Once again then, and indirectly as ever, the inevitable question that must sooner or later be answered somehow, of the proper attitude of the factory reformer towards the labourer of full years and masculine gender comes up for discussion and remains unanswered. By various

ways and under many guises the reply to this fundamental question has been postponed, since it first attained full prominence under the dual Acts of 1867, and a deliberate attempt was made to dispose of it in a negative fashion by the Factory Act of 1878. But there it is still. one of the last, and certainly the greatest problem that is left. "Nothing," says a writer in *The Daily Chronicle* of now some years ago, "is more curious than the sort of respect which has been paid to the liberty of this unfortunate subject, the circuitous route by which protective measures have found their way round to him, thanks to the presence of women and children in the workshop." But at length he emerges on the scene in full view, ferreted out from his grim surroundings and disencumbered of every fiction as to his identity. What is to be done with him? Well-organized industries appear inclined to give the answer by taking the matter into their own hands and forcing him under the Factory System anyhow, but what of the ill-organized ones; what of those not organized at all, and what of the man's own option? On the one hand, does it not seem a monstrous inversion of justice to withhold protection from a person who obviously needs it most as the revelations of the "Sweating Committee" amply proved this one to do, on the other, is it not an incomparable invasion of individual rights to prescribe to a man that he shall not work for his living in his own house—or out of it—as he thinks fit?

The difficulty loses little of its acuteness when it is transferred to the case of women and children, partially legislated for in the way we have seen. Is it proper that the work of these when it results in products offered for sale on the principle of open competition should remain unregulated though exclusively confined to the family circle? Is it

fair to them—and others? But can it in decency be hindered? What of the industrious member of a poor family eking out an inadequate and precarious livelihood by spontaneous effort at home? Is such a one to be proceeded against, and idleness encouraged? There is surely matter for reflection here before such a step is finally taken. Meanwhile, the efforts that have been made to bring some places where this is done (and not others) within the ordinary provisions of the law under the titles Domestic Factories and Domestic Workshops have not so far been rewarded with much success.

CASUAL AND VAGRANT LABOUR.—The number of persons who live by casual and vagrant labour, with or without some kind of temporary or permanent subvention, is very considerable and is believed to be increasing. Such persons are practically unprovided for by factory law. A good deal of attention has been called to them of late, especially the irjuvenile members, and particularly in connexion with what are called “blind alley” employments, that is to say occupations which, specially suitable to the young, lead nowhere. Something has been done for them by recent Children’s Employment Acts, in particular the Employment of Children Act, 1903 (3 Edw. VII., c. 45), to which allusion has been already made (p. 143). The matter is of course only indirectly related to our theme.

LITERARY AND ARTISTIC INDUSTRY—A large field of human effort, both industrial and otherwise, remains still unaccounted for. Of the first kind, are the labours of designers, draughtsmen, mechanicians, carriers of goods; clerks in commercial houses, banks, lawyers’ offices, and the like. Of the second are the labours of teachers,

writers for the press, and copyists, authors, artists, actors—and a host of others. Some of these labourers are already provided for under separate codes of regulations, as teachers in public schools, others have secured some share of protection under the Factory (and allied) Acts, as juvenile actors (p 143), assistants to photographers,¹ chimney sweeps, etc., tradition and custom affords a measure of protection to some more, as clerks in banks, and exterior organization may provide help for a few others where organization has been successfully undertaken. Still a large number of such-like occupations remain quite unregulated, as is the case with agriculture and domestic service. In such instances as law-copying, for example, and typewriting, no protection at all is afforded; and that notwithstanding that in these instances it may be specially needful—the keenest form of competition being rampant there—notwithstanding, too, that letterpress printing is a very carefully supervised industry under the Factory Acts, and that the profession of the law affords in its upper branches at all events one of the most perfect modern instances of the old guild ideal. It may well appear strange too in this connexion that a well-ventilated workshop where young labour is employed in some healthy physical occupation is strictly required to be white-washed every *fourteen months*, while a lawyers' office (for instance), where other young labour is employed, is apparently under no obligation of cleanliness at all. This, with some other seeming anomalies: the anomaly for instance that allows of a young person working at a lesser age underground in a mine than above ground; or that requires a health certificate from one inside a textile factory, but not from

¹ Photographic studios where pictures are provided for sale are classed as Non-Textile Factories or Workshops.

one working outside in a rope-walk, or that calls a great establishment where hundreds of garments are turned out by hand per week a workshop but a single room in a dwelling-house where a little book-binding is carried on a factory, are mainly faults of classification, or they have some historical, technical, or other good reason for existence. They are in no case unremediable. The Factory Acts, as has been often said, do not profess to be a complete and unalterable expression of the intentions of the legislature towards labour, even of the material, and still less of the immaterial kind. It is their justifiable boast, on the contrary, that they continue elastic and receptive, responsive to any new impulses of proved justice and humanity that call to them for help. Whether it will be ever possible to so extend their basis as to comprehend under one measure the enormously wide field of human interests we have now passed in review is doubtful. It is certain at all events that they have still other possible triumphs before them, even if their ultimate form be very different from at present and the distinctive name be perhaps lost.

APPENDIX

APPENDIX

REQUIREMENTS OF THE FACTORY ACTS

ABSTRACTS

THERE are ten Abstracts of the law relating to the several classes of works legislated about, and two supplementary ones in the class of Textile Factories. A few requirements are common to all of these, a few are common to several, while in many particulars they all vary. The titles are given in a list which follows

NOTICE OF OCCUPYING A FACTORY OR WORKSHOP

A requirement common to all is that of giving notice of first occupying a factory, workshop, or laundry, which is required to be in writing, and served on an inspector within one month of occupation, that is either the inspector of the district (whose name will be found at any other factory or workshop already inspected), or addressed to the Home Office, London. This notice should state "the place where it is situate, the address to which he (the occupier) desires his letters to be addressed, the nature of the work, the nature and amount of the moving power therein (if any), and the name of the firm under which the business of the factory or workshop is to be carried on." If this notice is not sent within the stipulated time the person commencing business is liable to a fine of £5.

AFFIXING PAPERS

Another requirement common to all is that of fixing the proper Notices where needed, namely, in addition to the Abstract itself, a notice of the names and addresses of inspectors and certifying surgeons (see below) appointed to that district, of the periods of employment and time allowed for meals at the works, of some public clock by which those times are regulated, and of the mode of school attendance (where children are employed). But some of the latter particulars are not applicable in domestic factories and workshops and where women only are at work; nor to docks, wharfs, quays, warehouses, or buildings; nor in workshops where men are employed alone. It has become usual for the factory inspector to supply these papers in the first instance (after receiving information of the opening of a new place of work), but it is not obligatory on him to do so, whilst it is always obligatory on the occupier to have them always affixed, the penalty for default being anything up to £2.

Besides the above there are a number of other Notices referring to exceptions, modifications, and enlargements of the general law (a list of which will be given hereafter), and which are alike required to be procured and affixed by the occupier before acting on them, and these must be kept so affixed, and renewed when necessary at his expense, under penalty of the advantages derived from or the obligations imposed in them being construed to his disadvantage, if not thus kept, and the ordinary process of the law set in motion to punish him accordingly.

REGISTERS

Registers are bound to be kept "in the prescribed form, and with the prescribed particulars" in all factories, workshops and laundries. The prescribed particulars are the following: Particulars of the name, location, and nature of the manufacture, of the name of the employer, of the clock by which the hours of labour are regulated, and of the nature and amount of the moving power. Particulars of the holidays (see below) given each year, and of the period when the factory was lime-washed or painted (see Sanitation). A list of children attending school, with certificates of their age and fitness for employment if employed, and of young persons over the school age and under eighteen, of every Special Exception availed of, and every accident and case of industrial poisoning occurring, of date of Annual Return, and list of Outworkers, of when boilers (if any) were examined, and of coincident employment in factory or workshop and shop. All the entries in this book are to be made by the employer, except those made by the certifying surgeon, and one entry on the first page by the inspector. The fine for not keeping this book as required is a penalty not exceeding £2.

EMPLOYMENT OF CHILDREN

The occupier of any factory or workshop taking a child into employment is bound to satisfy himself of the child's age, the child's health, and a certain educational proficiency, and is responsible to the law if under any circumstances he should employ him under the legal age (of 12) or without the other necessary qualifications. The proper way of

obtaining proof of age is by procuring a certificate of birth, but should this be unattainable the declaration of the child's parent before a magistrate may be accepted as sufficient evidence. The certificate of educational proficiency required varies in different localities according to the local bye-laws of the district, and may be sometimes remitted for a certificate of attendance, and it is necessary for the employer to familiarize himself with these laws and see that neither in this nor any other particular he is imposed upon. It never can be too strongly pointed out that in all matters relating to employment under the Factory Acts the *employer* is responsible for whatever breaches of the law occur, except in the two unusual instances of its being shown to the satisfaction of an inspector that an agent has disobeyed his master's instructions and really committed the offence, or of himself being willing to prosecute that agent on the same plea. The employer is also bound to procure (besides the certificates of age and proficiency) a certificate of the child's physical fitness for employment in a factory, and in some workshops (see Register). This is granted, or not, upon personal examination by a medical man appointed for the purpose, called the Certifying Surgeon, either at the factory or his own residence, and must be obtained within seven days of the first employment of the child unless the factory be over three miles from that residence, when the period is extended to thirteen days. Where the total number of children and young persons at the same place is less than five the examination may be at the surgeon's house, and the fee for each certificate is sixpence, but where more than that number are employed together it must be at the factory. In that case, either a rate of payment is agreed upon by the occupier and surgeon together, or appeal can be made to a

scale of fees incorporated in the Act of Parliament. If even after all these precautions an inspector thinks a child not capable of work he can require him to be examined again, and unless the examination be satisfactory he will be disqualified, and under no circumstances can a child work full time in a factory or workshop under thirteen years of age.

EDUCATION

Children once admitted into a factory or workshop are employed there in connexion with either of two systems of instruction at school, either on the "half-time" or "alternate day" system. The parent is liable if the child does not attend regularly, and the employer is liable if he fail to obtain from the schoolmaster certificates weekly of such attendance, and to keep them for two months, and exhibit them within that time to an inspector if required. He is also liable to punishment if he sets a child to work during a current week before all deficiencies of attendance for the previous week have been made up. But a child is excused from attending school on every Saturday, and on any school or factory holiday or half holiday, and "on every day on which he is certified by the teacher of the school to have been prevented from attending by sickness or other unavoidable cause," or "where there is not within the distance of two miles, measured according to the nearest road from the residence of the child, a *recognized efficient school* which the child can attend." The date of the educational certificate entitling the child to work must be entered in the Register.

EMPLOYMENT OF YOUNG PERSONS

A *young person* is a person of the age of fourteen and under eighteen, but a child of thirteen who has passed the required standard of the Educational Code may be employed as if he were such a one. In taking a young person into employment for the first time, or in passing it from the category of children to that of young persons, the preliminaries are the same as in first employing a child, with the exceptions that no certificate of proficiency is required at fourteen years of age, nor of fitness after sixteen. Up to eighteen its name has to be registered all the same, but the Roman numerals XVI are then inserted in the column provided for the purpose in the book and when either a child or young person ceases to be employed the word Left should be written in that same column opposite the name. No attendance at school is required from young persons, nor any certificate of previous attendance or proficiency.

WOMEN

A *woman* is a female person above the age of eighteen. It is not necessary to register the names of women either in factories or workshops, nor are any certificates required in connexion with their employment. Their standing is in other respects, both in factories and workshops, the same as that of young persons. except when adult women work exclusively together, when there are different arrangements for the hours of labour, as we have seen. A woman may not be knowingly employed for four weeks after childbirth.

HOURS OF LABOUR

The hours of labour vary in the various classes of establishments. In *Textile* factories the limits are from 6 A.M. to

6 P M , or 7 A M to 7 P M , with two hours out for rest and meals on every working day except Saturday , and on Saturday to 12 30 or 1 P M respectively, with one hour's interval = $55\frac{1}{2}$ a week In *Non-textile* factories, the same hours (ordinarily) for beginning and ending, with $1\frac{1}{2}$ hours out for meals, and till 2 P M on Saturday = 60 hours per week , but the period of employment may also be from 8 to 8 and even in certain industries from 9 to 9, and till 2, 3 or 4 on Saturday In Print, Bleach, and Dye Works, the hours are the same as textile factories In Workshops (except Domestic and "Women's" Workshops) the same as non-textile factories, but no child, young person or woman may work longer than $4\frac{1}{2}$ hours in a textile or 5 hours in a non-textile factory, laundry or workshop without an interval of at least half-an-hour In Domestic Workshops the hours are from 6 A M to 9 P M , with $4\frac{1}{2}$ hours out for meals, for women and young persons , and the same hours as in other factories and workshops for children For Women's Workshops, that is to say places where no person under the age of eighteen is employed, the time is a specified period of twelve hours taken between six in the morning and ten in the evening at their own option, with $1\frac{1}{2}$ out for meals, and of eight hours on Saturday, to terminate not later than 4 P M , less half-an-hour for meal-time For Factory Bakehouses the same as Non-Textile factories and for Wholesale and Retail bakehouses the same as Workshops (with some modifications) In laundries, whether Factory or Workshop, special periods of employment are permitted, and may be varied on any day before work begins The hours of labour in Docks, etc , are not regulated , neither are these in Men's Workshops

The occupiers of the workplaces, or their agents, are responsible for the hours of labour not being exceeded

in them, whether with or without the consent of any person employed there, and for all proved breaches of the law, except in a Tenement Factory or Workshop, where the *owner* has also some responsibilities, and in certain cases throughout where the 'actual offender' may be held liable

SANITATION

The requirements of the Factory Acts in regard to Sanitation are very numerous, and partly contained in other statutes. In general, all factories and workshops are bound to be kept in a cleanly state and free from any noxious effluvia, or other nuisance. They must not be overcrowded, and must be ventilated "so as to render harmless, as far as practicable, any gases, dust, etc., that may be generated in the course of the manufacturing process." They must be kept dry, and at a proper temperature. With respect to *overcrowding*, it has been decided that 250 cubic feet of air for each worker is a reasonable allowance during ordinary work hours, and 400 when working overtime (see Overtime); and, except in cases where *special exceptions* have been granted, all inside walls of rooms, and all ceilings, and all passages and staircases (unless painted with oil or varnished within seven years) are bound to be lime-washed once at least within every period of fourteen months. A considerable number of places are however exempted from this last requirement, for information as to which it is desirable to apply to the inspector of the district whose name is (or should be) written on the Abstract at the entrance of the workplace. In some places there are further exceptional requirements, which it is most important to become familiar with, and in the case of Cotton Cloth and other humid Factories elaborate arrangements are in force which should be studied separately. Sufficient and

suitable accommodation must be provided for men and women separately Artificial ventilation must be resorted to where needed

The enforcement of this part of the law so far as workshops are concerned is committed to District Councils , with some general supervision only by factory inspectors, and certain powers of action in default Further duties are also cast upon those bodies, and upon Medical Officers of Health, in respect to factories and workshops injurious to health, or where infectious disease is likely to be disseminated , and to underground bakehouses It is most important that occupiers of all such premises should familiarize themselves with these requirements, as they may otherwise commit offences and become a danger to their fellow-citizens even unwittingly It is no less important for District Councils and Medical Officers of Health to keep them in mind and consistently act up to them. Finally, it is well to bear in mind that "every medical practitioner" has the duty cast upon him of notifying to the Chief Inspector of Factories certain specified illnesses contracted in any factory or workshop, under a penalty not exceeding forty shillings (1 Edw. VII., c 22, sec 73)

HOLIDAYS

No child, young person, or woman may work in any factory or workshop on Sunday, except male young persons employed in day and night shifts in blast furnaces and paper mills, and Jews, and except women and young persons in creameries for three hours a day during the months of May to October. They must not be employed on Christmas Day or Good Friday (or the next Bank Holiday) , besides which eight half holidays or four whole ones must be given

in the course of the year, half of them being between the 15th of March and 1st of October. Notice of the holidays proposed to be given must be affixed in January if they vary from these as (especially in Ireland and Scotland) they sometimes do. But these holidays are not compulsory in Domestic Workshops.

INSPECTION

Employers must afford facilities of inspection to all officers furnished by a Secretary of State with a warrant for inspecting their places of work. Such officers have a right to call for the production of all registers, certificates, etc., required to be kept in conformity with the Factory Act, and to examine and copy them at their option. They may take a Medical Officer of Health, or other sanitary officer, with them into a factory or workshop, or a constable where obstruction is anticipated. An inspector may "enter, inspect, and examine at all reasonable times by day and night a factory and a workshop, and every part thereof, when he has reasonable cause to believe that any person is employed therein". . . and "examine either alone or in the presence of any other person, as he thinks fit, with respect to matters under this Act, every person whom he finds in a factory or workshop, . . . and . . . require such person to be so examined, and to sign a declaration of the truth of the matters respecting which he is so examined". He has certain powers in schools as well, and finally may "exercise such other powers as may be necessary for carrying this Act into effect". The penalty for obstructing an inspector in the discharge of his duty is one of the heaviest under the Factory Act—it is a fine not exceeding £5 if the offence is committed in the daytime, or not exceeding £20

at night The fine for wilfully signing or making a false Declaration required by him to be made is one not exceeding £20, or imprisonment not exceeding three months, with or without hard labour A factory inspector also enforces the provisions of the Truck Act in factories, workshops and laundries Every Inspector is furnished with a certificate of his appointment, and on applying for admission to any place he must, if required, produce it to the occupier Any one personating an Inspector is liable to a term of three months imprisonment with hard labour

SAFETY

Some onerous requirements are made in regard to safety. Every fly-wheel of an engine in a factory, *whether in the engine-house or not*, and every other dangerous part of it, and every hoist or teagle, is to be securely fenced Every wheel-race not otherwise secured must be fenced close to the edge All parts of the *Mill-gearing*, and all dangerous parts of the *Machinery*, must either be fenced or be of such a construction or in such a position as not to need it. The expression *mill-gearing* is defined It "comprehends every shaft, whether upright, oblique, or horizontal, and every wheel, drum, or pulley, by which the motion of the first moving power is communicated to any machine appertaining to a manufacturing process," while the term *machine* "includes any driving strap or band," in addition to the ordinary meaning No child, young person, nor woman may clean any mill-gearing in motion, nor a child any machinery in motion, or "any place under any machinery other than overhead mill-gearing", nor any of them work "between the fixed and traversing parts of a self-acting machine" under the like condition Every fatal accident that occurs,

and every accident from machinery moved by power, or from a vat or pan containing hot liquid, or from explosion, or from escape of gas, steam, or metal " which prevents the injured person, on any one of the three working days next after the occurrence of the accident from being employed for five hours on his ordinary work, must be reported to the inspector and certifying surgeon, or if not fatal and not caused by machinery moved by power, to the Inspector only " But an accident of the kind requiring to be notified under the Explosives Act, 1875, need not be so reported All fencing must be maintained in good order, and due provision be made for means of escape in case of fire Where steam boilers are used they must be kept in proper condition and examined once at least in every fourteen months by a competent person

OUTWORKERS

" The occupier of every factory and workshop (including any workshop conducted on the system of not employing any child, young person, or woman therein), and every contractor employed by any such occupier in the business of the factory or workshop, shall, if so required by the Secretary of State by an Order made in accordance with Section sixty-five of the principal Act, and subject to any exceptions mentioned in the Order, keep in the prescribed form and with the prescribed particulars lists showing the names of all persons directly employed by him, either as workman or contractor, in the business of the factory or workshop, outside the factory or workshop, and the places where they are employed, and every such list shall be open to inspection by any inspector under the principal Act or by any officer of a sanitary authority "

In compliance with this requirement Orders have been

SPECIAL RULES

171

issued requiring such lists to be kept in the case of industries named upon the current Abstract of the law

OVERTIME

Overtime is allowed in certain classes of employment to be worked that is by young persons and women. It is in no case allowed to children, and men are subject to no restrictions either (see Hours of Labour). An idea of the processes in which it is permitted may be gathered from the subsequent list (see Special Exceptions), but it is usually wiser to apply to an inspector for information in each specific case. The mode in which the privilege may be availed of is the following. No protected person can be legally employed overtime unless there is a special exception from the general law to that effect, nor until seven days' notice has been given to an inspector of an employer's intention to avail himself of this exception. The appropriate Forms must then be procured, and displayed on the workroom walls while the overtime is in progress, and a Register of such Overtime kept in the prescribed way. This Register is a book, similar to a cheque book, and the counterfoil and body should be duly filled up with a statement of the quantity of overtime worked on each occasion. It contains forty-eight notices. When used, a notice should be torn off and posted every evening before eight o'clock. The notice is addressed on the back, and need not be prepaid. The number of times that it is legal to work overtime in any period of one year is forty-eight.

SPECIAL RULES

In addition to all of these, the Secretary of State (Home Secretary) may make further special rules for the conduct of

any particular industry or process that seem to him desirable, and such are made from time to time where the process is peculiarly dangerous. The mode of doing this is the following. The Secretary of State furnishes to the persons affected notice of the proposed regulations. Objections to these, or any part of them, may be made, but must be lodged within 21 days. These objections are then considered, and if an agreement is not arrived at the matter is made the subject of a public inquiry, at which evidence on both sides is given. The result is then submitted for the consideration of Parliament. If the regulations are finally approved there they are published, and a copy must be affixed in each place to which they apply. If not approved there they are withdrawn. The regulations once published have the full force of Law.

PARTICULARS CLAUSE

Particulars of work and wages must be furnished to the operatives in certain classes of industry carried on by means of piecework. For list of industries see Abstracts.

SPECIAL EXCEPTIONS

The titles, numbers, and prices of special exceptions and other Forms are contained in the following list. They can be procured direct from publishers in London, Dublin, and Edinburgh, and some other large towns, or may be ordered through any stationer. They should be procured in duplicate, and one copy served on the district inspector. The other should be fixed in the workplace where and while work is going on.

In ordering forms the official number as
well as the title should be stated

LIST OF OFFICIAL FORMS

for use under the Factory and Workshop Acts The Forms
may be obtained through any bookseller

FORMS TO BE AFFIXED OR KEPT AT THE WORKS

(Unless otherwise stated, the sections referred to are those of the Act of
1901)

ABSTRACTS OF FACTORY ACTS.—

	Official Number	Price 3d.	Post age 1d.
*†Textile Factories	1	3d.	1d.
Supplementary, for Cotton			
Humid Textile } Cloth	313	3d.	½d.
Factories } Other	314	3d.	½d.
*†Print Works, Bleaching and Dyeing Works	5	3d.	1d.
*†Laundry Factories	6	1d.	3d.
*†Other Non-Textile Factories	2	3d.	1d.
*†Laundry Workshops	3	3d.	1d.
*†Other Workshops	4	3d.	1d.
†Docks, Wharves, Quays, Warehouses	56	3d.	½d.
†Buildings in Course of Construction	57	3d.	½d.
†Domestic Factories and Workshops	58	3d.	½d.
†Men's Workshops	59	3d.	½d.

* Including notices of period of employment and times for meals,
number of persons who may be employed in each room, and other
particulars.

† Welsh editions may also be obtained at the same price

		Official Price Number	Post- age
NOTICE OF HOURS and Intervals	{	in Tenement Factories, for separate tenements (s 87)	47 1d ½d
		in other Works (s. 32)	— — —
		Included in Abstracts	— — —
NOTICES AS TO PROHIBITION OF EMPLOYMENT OR MEALS IN CERTAIN WORKS (ss. 77, 78)			
Included in Abstracts ..		—	— —
NOTICE OF AIR-SPACE in each room, and of number of persons who may be employed during ordinary hours (s 3)		46	1d ½d.
Required only where these entries are too numerous to be made in the space provided for the purpose on the Abstract ; and in Men's Workshops.			
GENERAL REGISTER (s. 129)	{	For Factories, and for Workshops in which certificates of fitness are required	37 6d. 1½d.
		For other Workshops	38 3d. ½d.
Parts of the General Register issued separately	{	Part II, Young Persons	71 6d. 1½d.
		Part III, Children .	72 6d. 1½d.
They can be bound up (to order) with the General Register (Form 37)	{	Parts IV. and VIII., Accidents and Steam Boilers ...	73 6d. 1½d.
		Part VII., Employment in Factory or Work- shop, and in Shop ...	74 3d. 1d.

LIST OF OFFICIAL FORMS

175

		Official Number	Price	Post- age
Supplementary Sheet for certain Charitable and Reformatory Institutions (s. 5 (2 ^c), 1907)				
		67	1d	$\frac{1}{2}d.$
SCHOOL CERTIFICATES (s 69) Books with space for—	{ 56 names, 8vo 504 names, 8vo 560 names, 4to 1050 names, fcap folio ...	39	3d	$\frac{1}{2}d.$
		39 ^A	6d	2d.
		39 ^B	6d	2d
		39 ^C	6d.	3d.
REPORT OF STEAM BOILER INSPECTION (s 11) (per 12 copies)				
		55	6d	1d.
OVERTIME RECORD (s 60), and Notice of number of persons who may be employed in each room during overtime				
		12	1d.	$\frac{1}{2}d.$
(See also Forms 21-25 and 54 below, and Forms 338 and 740, p. 3)				
HUMIDITY TABLE (ss 92, 96) for	{ Spinning by French or Dry Process ... Certain Other Humid Textile Processes ..	316	Supplied on appli- cation to H M. In- spectors	
		315		
HUMIDITY RECORD (ss 92, 96)				
For Entry of Read- ings of Thermo- meters	{ Humid Cotton Cloth Fac- tories (s. 92) (per 25 copies) Other Humid Textile Fac- tories (ss. 92 & 96) and Works under Flax, or Hemp and Jute Regula- tions (s. 79)	317	6d	$2\frac{1}{2}d.$
		318	6d.	$2\frac{1}{2}d.$

	Official Number	Price	Postage
LIST OF OUTWORKERS (s. 107), in book of 16 pages	44	2d.	1d.
FRUIT PRESERVING List of Persons employed under Special Exception (s. 41 (1 ^b)) (See also Forms 64 and 740, p. 3)	66	1d	$\frac{1}{2}$ d
REGULATIONS AND SPECIAL RULES, in placard form (see also Orders) — ...			

SPECIAL RULES

	Official Number	
c Red and Orange Lead	261	Supplied on application to H M Inspector
Yellow Lead	263	
c Lead Smelting	264	
a Earthenware and China	923	
a Transfers for Earthenware and China	254 ^a	
a Bichromate	260	
a India Rubber	274	
Hides and Skins	486	
		Price Postage
a White Lead	247	1d $\frac{1}{2}$ d
c Chemicals	258	1d. $\frac{1}{2}$ d
\ Aerated Waters	273	1d. $\frac{1}{2}$ d.

b, f, REGULATIONS

d Felt Hats	741	1d.	$\frac{1}{2}$ d.
File Cutting by hand	913	1d	$\frac{1}{2}$ d.
a Electric Accumulators	386	1d.	$\frac{1}{2}$ d.
cc Docks, etc.	938	1d.	$\frac{1}{2}$ d.
c Self-acting Mules	941	1d.	$\frac{1}{2}$ d.
Woolsorting and Woolcombing	942	1d.	$\frac{1}{2}$ d.
Flax	943	1d.	$\frac{1}{2}$ d.

LIST OF OFFICIAL FORMS

177

	Official Number	Price	Post- age
<i>e</i> Locomotives	944	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
<i>ae</i> Paints and Colours	945	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
Hemp and Jute . .	946	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
<i>a</i> Heading of Yarn	947	Supplied on applica- tion to H M Inspector	
<i>g</i> Horsehair	949	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
<i>e</i> Brass	950	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
East Indian Wool	951	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
<i>a</i> Vitreous Enamelling of Metal or Glass	952	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
<i>a</i> Nitro- and Amido-Derivatives of Benzene, and Explosives	953	Supplied on applica- tion to H M Inspector	
Electricity	954	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
do (abridged, for certain low pressure systems)	954 ^a	Supplied on applica- tion to H M Inspector	
<i>a</i> Tinning	955	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>
Grinding of Metals	956	1 <i>d</i>	$\frac{1}{2}$ <i>d</i>

a A Health Register is required—see below*b* Copies must be given to workmen*c* A Register of chains is required—see below*d* Certain Notices are required—see below*e* Welsh Editions can be obtained on application to H M Inspector*f* Supplied also (price 1*d*., by post 1 $\frac{1}{2}$ *d*.) in pamphlet form as a Statutory Order*g* A Register of Disinfection is required

HEALTH REGISTERS —

Earthenware and China*, India Rubber, Transfers for Earthenware and China, White Lead, Electric Accumulators, Bichromate, Paints and Colours, Head- ings of Yarn, Nitro- and Amido-Deriva- tive of Benzene and Explosives, Vitreous Enamelling, Tinning, etc	605	3 <i>d</i> .	1 <i>d</i>
--	-----	--------------	------------

* Earthenware and China. Portable Register for
Casual Workers

. 610 3*d*. $\frac{1}{2}$ *d*.

OTHER FORMS REQUIRED UNDER REGULATIONS
AND SPECIAL RULES.—

Felt Hats—Notices to be affixed	in proofing room (per 6 copies)	765	1 <i>d</i>	$\frac{1}{2}$ <i>d</i> .
	in stove room (per 6 copies)	766	1 <i>d</i>	$\frac{1}{2}$ <i>d</i> .
Docks, etc.—Register of Chains		75	1 <i>d</i>	1 <i>d</i>

Earthenware and China—Schedule B.	...	925	Supplied on application to H M Inspector	
-----------------------------------	-----	-----	---	--

Flax Hemp and Jute	{ Notice to dispense with daily readings of Thermometers }	70	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .
		69	1 <i>d</i>	$\frac{1}{2}$ <i>d</i> .

Brass—Notice claiming exemption of cast- ing shop		68	1 <i>d</i>	$\frac{1}{2}$ <i>d</i> .
Horsehair—Anthrax Cautionary Placard		410	2 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .

FORMS TO BE KEPT AT WORKS, AND ALSO TO BE SENT TO
INSPECTOR

(A counterfoil is attached to each Form for the latter purpose)

SPECIAL EXCEPTION NOTICES Notice of intention to use Special
Exception as to —

Overtime See also Forms 338 and 740, p 3	{	Ordinary (s. 49)	21	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .
		Laundries (s. 2 (1 ^b), 1907)	54	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .
		Perishable Articles (s. 50)	24	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .
		Incomplete Process (s. 51)	22	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .
		Turkey-red Dyeing, Open- air Bleaching (s. 53) ..	23	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .
		Water Mills (s. 52)	25	1 <i>d</i> .	$\frac{1}{2}$ <i>d</i> .

LIST OF OFFICIAL FORMS

179

		Official Number	Price <i>Id.</i>	Post- age <i>d.</i>
Period of Employment	9 A.M. to 9 P.M. (s. 36) in Book- binding Works and Laundries	9	<i>Id.</i>	$\frac{1}{2}d.$
	Extended Periods for Women on 3 fixed days per week, in Laundries (s. 2 (1 ^c), 1907) ..	53	<i>Id.</i>	$\frac{1}{2}d.$
	Different Periods on different days of the week, in Laundries (s. (2) (1 ^c), 1907) .	51	<i>Id.</i>	$\frac{1}{2}d.$
	On Saturdays in Turkey-red Dyeing (s. 44) . .	14	<i>Id.</i>	$\frac{1}{2}d.$
	In Jewish Works (s. 47) .	17	<i>Id.</i>	$\frac{1}{2}d.$
	See also Form 18 below			
	In Fish-curing (s. 41) . .	63	<i>Id.</i>	$\frac{1}{2}d.$
	In Fruit-preserving (s. 41) .	64	<i>Id.</i>	$\frac{1}{2}d.$
	See also Form 740 below and Form 66, p. 2			
	In Creameries (s. 42) ...	65	<i>Id.</i>	$\frac{1}{2}d.$
	For Male { in Glass Works (s. 55)	28	<i>Id.</i>	$\frac{1}{2}d.$
	Young Per- { in certain other sons over 14 { Works (s. 54)	26	<i>Id.</i>	$\frac{1}{2}d.$
	For Male { in Lace Fac- tories (s. 37)	10	<i>Id.</i>	$\frac{1}{2}d.$
	Young Per- { in Bakehouses sons over 16 { (s. 38)	11	<i>Id.</i>	$\frac{1}{2}d.$
	{ in Newspaper Printing (s. 56)	27	<i>Id.</i>	$\frac{1}{2}d.$
	{ in certain other Works (s. 54)	26	<i>Id.</i>	$\frac{1}{2}d.$
Substitution of another day for Saturday				
(s. 43)	13	<i>Id.</i>	$\frac{1}{2}d.$

	Official Number	Price	Post age
Substitution of Friday for Saturday for Sunday in Jewish works (s 48)	18	1d	$\frac{1}{2}$ d.
Separation of Sets for different Holidays (s. 45)	16	1d.	$\frac{1}{2}$ d
Separation of Sets for different Meal Hours (s. 40)	19	1d	$\frac{1}{2}$ d.
Employment during Meal Hours (s 40)	20	1d.	$\frac{1}{2}$ d.
Five-hour Spell in certain Textile Factories (s 39) .	15	1d.	$\frac{1}{2}$ d.
Exemption from Limewashing, etc. (s 1)	60	1d.	$\frac{1}{2}$ d.
NOTICE OF EIGHT HOURS EMPLOYMENT OF Women and Young Persons (s 30)	.. 30	1d.	$\frac{1}{2}$ d.
NOTICE OF CHANGE OF HOURS OR MEAL-TIMES in Factories and Workshops (s. 32 ^d)	.. 31	1d	$\frac{1}{2}$ d.
NOTICE OF ALTERATION OF SYSTEM OF EMPLOY- ING CHILDREN (s. 32 ^a)	... 33	1d.	$\frac{1}{2}$ d.
NOTICE FIXING OR ALTERING HOLIDAYS (s. 35 ^e)	34	1d	$\frac{1}{4}$ d.
OVERTIME REPORT AND REGISTER	<div> <div> Fruit Preserving under Special Exception (s. 41 (1^b)) Other Works </div> <div> 740 338 </div> </div>		
Books of 30 Reports, franked for post, with counter- foils as Register			
Supplied on application to H.M. Inspector			
OTHER FORMS, TO BE SENT BY OCCUPIER			
NOTICE OF OCCUPATION of Factory or Work- shop (s 127) 35	1d.	$\frac{1}{2}$ d.
NOTICE OF ACCIDENT (s. 4, Notice (per 25 copies) of Accidents Act, 1906) (per 2 copies)	43	4d.	2d.
(books of 150 copies)	43 ^a	2s.	5d.

LIST OF OFFICIAL FORMS 181

		Official Number	Price	Post- age
NOTICE OF POISONING (s. 73)	(per 25 copies)	40	6 <i>d.</i>	2 <i>d.</i>
Anthrax, Lead, Phosphorus	(per 2 copies)		1 <i>d.</i>	$\frac{1}{2}$ <i>d.</i>
Mercury or Arsenic				
LIST OF OUTWORKERS (s. 107) (see p. 2)				
WOMEN'S WORKSHOP NOTICE (s. 29) . . .		29	1 <i>d.</i>	$\frac{1}{2}$ <i>d.</i>
ANNUAL RETURN from certain Charitable and Reformatory Institutions (s. 5 (2°) 1907)		52	1 <i>d.</i>	$\frac{1}{2}$ <i>d.</i>
HUMIDITY NOTICE (ss. 93, 96)		61	1 <i>d.</i>	$\frac{1}{2}$ <i>d.</i>
(See also Forms 317 and 318)				

INDEX

A

- Abstract, of Factory Act, 61, 85, of Factory and Workshop Acts, 161
Accidents in factories legislated for, 85
Adult Labour, of women, 83, 85, 107, 110, 113, 115, 119, 121, of men, 109, 114, 119, 151
Age Certificates, 78, 107
Agriculture, and machinery, 18, not legislated for, 146
Agricultural Children's Act, 147
Aikin, Dr, meaning of the word "factory," 1, Sheffield industries, 17
"Alfred" (*History of the Factory Movement*), on parish apprentices, 36, character of Sir Robert Peel, 57, real name of, 57, *note*
Alkali Works, 130
Allen, Wm, factory reformer, 42
Anderson (*History of Commerce*), early master manufacturers in England, 11, description of Lombe's factory, 22
Apprentices, Apprentice Act, 2, 53, abuse of labour of, 35, legislated for, 54, 60, 149
Arkwright, Sir Richard, and factory system, 19, 20
Artistic industry, 151
Ashley, Lord, factory reformer, 42, 45, 65, 78, 82, 84, 87, and agriculture, 45, and Mines Act, 82
Assyria, ancient factories, 6, labour system of, 50
Automatic, production, 28, distribution, 28

B

- Bacon, Lord, on trade fraternities, 14
Barnes, Mr, on the word factory, 1
Bakehouses, legislated for, 89, 131; underground, 123, 132, retail, 117
Berlin Conference, 120
Birmingham industries, 14

- Bleaching and Dyeing, legislated for, 86, 89, 102
- Blincoe, Robert, history of, 37
- Boilers, legislated for, 123
- Bonomi, Mr, on Babylonian factories, 6
- Bottle Washing, legislated for, 124
- Brotherton, Joseph, factory reformer, 43
- Building, and legislation, 121, 141
- Bull, Rev G S, factory reformer, 42, 43, 81

C

- Canal Boats, legislated for, 131, 139
- Carpet Beating, legislated for, 124
- Cartwright, Rev Mr, and the power loom, 20
- Certificates of Age required, 74, 85, of fitness, 129, *note*
- Child*, definition of, 74, 77, 107, and public entertainments, 143, employment of, 45, 56, 58, 60, 74, 86, 93, 100, 108, 123, 134, 136, 167
- Chimney Sweeps, legislated for, 126
- Cobbett, Wm, factory reformer, 43
- Commissions, First Children's Employment, 46, 82, 86, 90, Second Children's Employment, 88, 98, First Royal, 73, Second, 89, 111, Third, 118
- Committees of Inquiry on Factory labour, 56, 58, 63, on "Sweating System," 116, Chimney Sweeps, 127
- Cooke Taylor, Dr, on Egyptian factories, 5
- Cotton Cloth (steaming) Act, 117, 121, 168
- Creameries, legislated for, 123
- Crompton, Samuel, inventor of "the Mule," 19
- Cross, Sir Richard, views on factory legislation, 110

L

- Dale, David, proprietor of New Lanark Mills, 37
- Daniel, Thomas, member of first "Short Time Committee," 40
- Derby, first seat of modern factory system, 21
- District Council, duties of, 123, 169
- Docks, 121, 124, 140
- Doherty, John, member of first "Short Time Committee," 40
- Domestic Service, and Factory Acts, 148
- Domestic System of manufacture, 13, 15, 17, 114, *note*
- Domestic Workshops, defined, 113, legislation for, 119, 151
- Dry Cleaning, legislated for, 124
- Dyeing (and Bleaching), legislated for, 86, 102

E

- Edward III establishes English woollen manufacture, 10
 Egypt, ancient factories of, 5, labour system of, 31, 48, 50
 Electrical generating Works, legislated for, 124
 Eldon, Lord Chancellor, on overworking children, 44, *note*
 Explosives, legislated for, 131, 172

F

- Fabrica*, Roman, at Bath, 7, 23
 Factory, meaning of the word, 1, 3, 31, 47, 103, 112, and *mill*, 1, 2, 74, ancient factories, 5, mediæval, 10, first modern, 21, early locations of, 35
 Factory Acts, 2, 53, 61, 63, 73, 84, 87, 93, 94, 101, 104, 110, 117, 118, 120, 122
 Factory legislation, 30, 32, 48, 52, 64, 74, 116, 133, 140, 145, and politics, 64
 Factory System, ancient, 7, 8, characteristics of modern form, 23, 145, philosophy of, 25, 104, 138, and industrial revolution, 29, 145, and machinery, 3, 29, and factory controversy, 25
 Fawcett, Professor, views on factory legislation, 110
 Fencing machinery, 83, 85, 88, 119
 Fielden, Mr, on parish apprentices, 36, factory reform, 43, 87
 Fire, means of escape from, 119, 121
 French (*Life of Crompton*), first use of the word "factory," 2
 Fulling mills, early mention of, 10

G

- Graham, Sir James, and factory legislation, 82
 Grant, Philip, member of first "Short Time Committee," 40
 Grey, Sir George, and factory legislation, 88
 Guilds, relation to industry, 8, 14, 50

H

- Half-time system, 82, 85, 86, 99, 165
 Handicraft, definition of, 100
 Hanway, Mr, and chimney sweeps, 127
 Hargreaves, James, invents the spinning jenny, 19
 Henderson, Mr, on women's industry, 108
 Henry I. settles colonies of Flemish weavers in England, 9

- Highs, Thomas, inventor of spinning machinery, 19
 Hindley, Charles, factory reformer, 43, advocates a limit on the use of machinery, 81
 Hobhouse, Sir J C, factory reformer, 62, 73.
 Holidays, 169, on Saturday, 62
 Home work, 92, 114, 150
 Hours of work in factories at present, 166, in workshops, 166
 Howell, Mr, on "sweating," 115

I

- India, factory system, 29, and *note*
 Industrial Revolution, and factory system, 29, 94
 Inspectors of Factories, 74, 83, 85, 99, 119, 130, 170, Chief, 121
 Iron manufacture, Roman, 7, early English, 11, 23

J

- Jack of Newbury, 11
 James, Mr, on ancient factories, 6

K

- Kay, John, early spinning machinery, 19, *note*

L

- Lace Works, 86, 92
 Laundries, 137
 Literary industry, and factory legislation, 151
 Local authorities, and factory legislation, 99, 118, 119, 123, 136
 Lombe, John, romantic adventures of, 22
 Lombe, Sir Thomas, erects first modern factory, 22
 Lubbock, Sir John, and shop labour, 135
 Lyell, Sir Charles, primitive factories, 5

M

- Machinery, and factories, 3, 16, 18, 29, 88, 109, 122
 Manchester, first appearance in industrial history, 10
 Manufacture, meaning of term, 96, 133, process of, 96
 Maspéro, M, on Egyptian spinning mills, 6
 Maule, Mr Fox, on factory legislation, 81
 Marx, Karl, on Second Children's Employment Commission, 90
 McCulloch, Mr; the word "factory," 2

INDEX

187

Medical Officer of Health, 169, 170
 Mill, meaning of the word, 1, 23, and factories, 1, 2, 74, gearing, 3, 88, 171
 Mines, legislation for, 82, 128,
 Morpeth, Lord, factory reformer, 73
 Moths, prohibition of employment, 119
 Mundella, Mr ; views on factory legislation, 110

N

Nicholls, Sir George , prosperity of Norwich manufactures, 13
 Night defined, 74 , night work permitted, 97
 Non-Textile factory, term first used, 112 , definition of, *idem* , legislation for, 113, 123
 Normal working day, 75, 77, 101, 103, 122
 Normans introduce skilled workmen into England, 9
 Notices required in factories, 85, 122, 161, 173, 175

O

Oastler, Richard, and factory reform, 40, 41, 81, 88
 O'Connell, Daniel, and factory reform, 43
 Outworkers, 120, 123, 151, 172
 Overcrowding, legislated for, 122
 Overtime, 121, 173
 Owen, Robert, factory reform, 39, 40, prepares a legislative measure, 40, fails to enter Parliament, *idem*
 Owen, R D., on New Lanark Mills, 38 ; general condition of factory operatives, 39

P

Particulars required in factories, 120, 121, 124, 174
 Paul, Lewis, and spinning machinery, 19
 Peel, Robert (1st baronet), and factory reform, 39, 44, 56, 60
 Peel, Robert (2nd baronet), and factory reform, 43, 82
 Perceval, Dr, factory reformer, 33
 Pit Banks, legislated for, 129
 "Plant" defined, 140
 Print Works, legislated for, 86, 89, 102
 Protection of Children's Act, 143, 151

Q

Quarries, legislated for, 128
 Quays, 121

R

- Radcliffe, Wm , on domestic industry, 15, 18
 Railways, 124, 139
 Register, to be kept in factories, 80, 163, and workshops, 122, 163
 Relay System, the, 77,
 Religious difficulty, and factory legislation, 83
 Rome, ancient factories of, 7, labour system, 31, 48
 Russell, Lord John, and factory legislation, 81, 87

S

- Sadler, M T., factory reformer, 42, 64, report of his committee, 65-70
 Sanitation of factories and workshops, 118, 124, 168
 Saturday half holiday incorporated in factory legislation, 62
 Scrivenor, Mr, the *Fabrica*, at Bath, 7
 Silk, English manufacture of, 21, 92, and factory legislation, 3, 74
 Sheffield, industries of, 16
 Shops, legislated for, 121, 133
 Slavery, and the Factory System, 31, 49
 Smiles, Mr, early English iron manufacture, 12
 Special rules in factories, 118, 123, special exceptions, 174
 Spinning machinery, 18
 Stanhope, Lord, introduces a Shop Hours Bill, 135
 Stanley, Lord, views on factory legislation, 59
 Statutes of labourers, 51
 Stevens, Rev. J. R., factory reformer, 42
 Sweating, 114

T

- Taylor, Dr, Isaac, neolithic factories, 5
 Temperature in factories, legislated for, 122, 124, Tenement factories and workshops, 121
 Ten Hours Bill, 64, 73, 81, 87, 88
 Textile Factory, term first used, 112, definition of, *idem*, legislation for, 105, 112, 117, 123
 Thompson, Mr Poulett, and factory legislation, 80
 Trade Unions and factory legislation, 105
 Transport, legislated for, 138
 Truck, 143
 Turner, James, member of first "Short Time Committee," 40

INDEX

189

U

Ure, Dr, on the factory system, 25, 28, 29, chemical and mechanical industry, 130

V

Von Plener, on factory legislation, 63, 90, 101, *note*

W

Warden, Mr, on ancient factories, 6

Warehouses, legislated for, 121, 140, and Wharfs, 121

White Lead Factories, special legislation for, 117, 119

Women, legislated for, 85, 100, 104, 109, 119, 121, 134, 136, object to legislation, 110

Wood, John, factory reformer, 41

Workman's Compensation Act, 142

Workshops, legislated for, 98, 104, defined, 99, 150

Wright, Mr Carroll, on Domestic System of industry 15, *note*, on factory system, 27

Wyatt, John, and spinning machinery, 19

Y

Young person, definition of, 74, 76, 166; employment of, 74, 86, 92, 99, 109, 134, 167

PRESS NOTICES OF THE FIRST EDITION

"The book is exactly what a manual on the subject should be, and nobody who is interested in public affairs should fail to make acquaintance with the important subject it treats of in such a thorough and convenient manner"—*Western Morning News*

"Full of valuable information"—*Spectator*

"Both as a succinct history of factory legislation and a digest of the law in its present complicated state the manual is very serviceable"—*Times*.

"An admirable review of the past and present state of factory employes"—*Whitehall Review*

"A hand-book which ought to be in the possession of everyone who takes an active part in the public life of the day."—*Reynolds' Newspaper*.

"A capital little manual of the history and working of our factory system"—*Scotsman*

"A book for the times"—*Daily Chronicle*.

"Everyone who wishes to obtain a concise view of our factory legislation will do well to consult it."—*Birmingham Post*

"An admirable summary of a subject very difficult to summarise shortly and intelligibly"—*Manchester Guardian*.

"A lucid, interesting, and thoroughly practical history of the factory system and the factory laws"—*Sheffield Telegraph*.

"The plan of the book could scarcely be improved."—*Westminster Review*.

"One of the really useful books written by men who have at once practical knowledge of their subject and power of imparting it."—*Pall Mall Gazette*.

THE RIVERSIDE PRESS LIMITED LONDON E.C.4

Messrs. Methuen's Complete Educational Catalogue

CONTENTS

	PAGE
CIVICS	3
COMMERCE	3
DIVINITY	4
DOMESTIC SCIENCE	5
ENGLISH	6
FRENCH	10
GENERAL INFORMATION	13
GEOGRAPHY	14
GERMAN	15
GREEK	17
HISTORY	18
LATIN	25
MATHEMATICS	29
SCIENCE	32
TECHNOLOGY	41
SERIES OF EDUCATIONAL WORKS	42
BOOKS FOR SENIOR PUPILS AND SCHOOL LIBRARIES	46

MESSRS METHUEN WILL BE GLAD TO SEND THEIR
COMPLETE ILLUSTRATED CATALOGUE OR PAR-
TICULARS OF THEIR BOOKS ON ANY SUBJECT TO
ANY ADDRESS, POST FREE, ON APPLICATION

METHUEN & CO. LTD., 36 ESSEX STREET, W.C.
LONDON
JULY 1911

NOTE

MESSRS. METHUEN will be happy to consider applications for Specimen Copies of any of the books in this list from Heads of Schools. Specimen Copies of many of their School Books are supplied gratis, but a charge must be made in all cases for volumes of Examination Papers and the higher priced books. Specimen Copies of Keys are not given. In writing please state the probable number of copies required if the book be adopted.

A copy of any book in this List can be seen at Messrs. Methuen's offices, 36 Essex Street, Strand, W C., and most of them may be consulted at the Library of The Teachers' Guild, 74 Gower Street, W C., at the Library of the College of Preceptors, Bloomsbury Square, W C., and the Teachers' Libraries at the Universities.

MESSRS. METHUEN'S EDUCATIONAL BOOKS

CIVICS

Home and State: An Introduction to the Study of Economics and Civics By SUSAN CUNNINGTON, Wiston's School, Brighton, Author of "The Story of Arithmetic," etc. Crown 8vo, 2s 6d.

This book is for the Upper Forms in schools, and gives in simple language an account of the fundamental principles which underlie our modern economic and political conditions. Throughout the present has been connected with the past, by noting the beginnings of corporate life and effort, and by tracing the development of political institutions.

The desirability of cultivating an intelligent patriotism is acknowledged by all, and there is a growing recognition that this can best be done, as in this book, by training in the young a conception of the value and meaning of civic and social responsibility.

The Rights and Duties of the English Citizen. By H. E. MALDEN, M.A. Seventh Edition. Crown 8vo, 1s. 6d.

A reader describing in outline the Imperial and Local Government of England.

A London Reader for Young Citizens. By F. W. G. FOAT, D.Litt., M.A., Lecturer in History and English at the City of London College, Assistant Master at the City of London School. With 4 Illustrations in Colour, 8 Maps, and 17 other Illustrations. Crown 8vo, 1s. 6d.

In fifty short sections, each forming a complete "lesson," the story of London is told. The treatment is that of the interesting class-lecture, not that of the formal history.

COMMERCE

The Economics of Commerce. By H. de B. GIBBINS, Litt.D., M.A. Second Edition, Revised. Crown 8vo, 1s 6d. [*Commercial Series.*]

This book presents in a simple, popular, and elementary way the main economic principles which underlie modern commerce.

Commercial Law. By W. DOUGLAS EDWARDS. Second Edition, Revised. Crown 8vo, 2s. [*Commercial Series.*]

A comprehensive outline of the Commercial Law of England adapted for students. As far as possible technical phraseology has been avoided, and the book has not been burdened with legal decisions.

A Primer of Business. By S. JACKSON, M.A. Fourth Edition. Revised and Enlarged. Crown 8vo, 1s. 6d. [*Commercial Series.*]

A sketch in a readable yet exact form of the salient points in the theory and practice of Modern Commerce. In addition to such fundamental subjects as Exchanges, Banking, and Insurance, it contains some account of Office-work, Book-keeping, Correspondence with Examples, and in particular, the best devices for sorting papers, docketing letters, reckoning dates, etc., are fully explained.

An Entrance Guide to Professions and Business. By H. JONES. With a Preface by H. de B. GIBBINS, D Litt, M A. Crown 8vo, 1s. 6d. [Commercial Series.]

This book deals with three professions and a large number of trades, and shows the qualities necessary to success in each, the age at which it is best to begin, the conditions of preparation, and the cost of all that is preliminary to the boy's earning his own living

Précis Writing and Office Correspondence. By E. E. WHITFIELD, M A. Third Edition. Crown 8vo, 2s. [Commercial Series.]

The subjects dealt with here are Business Correspondence in General, Circulars and Advertisements, Sale and Purchase, Carrying Trade, Transmission of Money, Précis, Civil Service Précis, Commercial Précis, Application of Précis to Journalism, Application of Précis to Foreign Languages

Commercial Examination Papers. By H de B. GIBBINS, Litt.D., M A. Crown 8vo, 1s. 6d. [Commercial Series.]

A volume of Examination Papers on Commercial Geography, Commercial History, Book-keeping, Business and Office Work, Commercial French, and Commercial German.

For other books on Commerce, see also under "French," "German," "Geography," "History," "Mathematics."

DIVINITY

The First Book of Kings. Edited by A. E. RUBIE, D D., Headmaster of Eltham College. With 4 Maps. Crown 8vo, 2s. [Junior School Books.]

The Gospel according to St. Matthew. Edited by E. W. SOUTH, M.A. With 3 Maps. Crown 8vo, 1s. 6d. [Junior School Books.]

The Gospel according to St. Mark. Edited by A. E. RUBIE, D D. With 3 Maps. Crown 8vo, 1s. 6d. [Junior School Books.]

The Gospel according to St. Luke. Edited by W. WILLIAMSON, B.A. With 3 Maps. Crown 8vo, 2s. [Junior School Books.]

The Acts of the Apostles. Edited by A. E. RUBIE, D.D. With 3 Maps. Crown 8vo, 2s. [Junior School Books.]

These editions are designed primarily for those preparing for junior examinations such as the Junior Locals, and those of the Joint Board. At the same time they will also prove useful for those preparing for higher examinations, such as the Higher Certificate. The editors have tried to make the introduction and notes as stimulating as possible, and to avoid mere "cram."

A Primer of the Bible. By W. H. BENNETT, M.A., Professor of Old Testament Exegesis at New and Hackney Colleges, London. With a concise Bibliography. Fifth Edition. Crown 8vo, 2s. 6d.

This Primer sketches the history of the books which make up the Bible in the light of recent criticism. It gives an account of their character, origin, and composition, as far as possible in chronological order, with special reference to their relations to one another, and to the history of Israel and the Church

Old Testament History for Use in Schools. By the Rev. W. F. BURNSIDE, M.A., Headmaster of St. Edmund's School, Canterbury. Fifth Edition. Crown 8vo, 3s. 6d.

A Fifth Form textbook written in the belief that it is possible with all reverence to tradition to make the Old Testament a real living force in religious education.

Stories from the Old Testament. By E. M. WILMOT-BUXTON, F.R.Hist.S. Crown 8vo, 1s. 6d. [*Beginner's Books*]

These stories have been told in the simple and dignified words of the Bible, with brief explanations where necessary, and selected so as to show the continuity of the Divine dealings with the Hebrew people in preparation for the revelation of the New Testament.

An attempt has been made to avoid the chief difficulty met with in teaching the Old Testament to children, by basing these stories on the firm foundation of spiritual rather than literal inspiration. It is hoped that by showing that they are concerned rather with *values* than with supernatural history, they may never have to be unlearned or unduly modified in later years.

Stories from the New Testament. By E. M. WILMOT-BUXTON, F.R.Hist.S. Crown 8vo, 1s. 6d. [*Beginner's Books*]

Arranged in the form of consecutive stories, with brief explanations and connecting links where necessary, this volume forms a complete life of Christ, together with an account of the Early Church and the life of St. Paul. The stories are told almost entirely in the words of the Bible, and form a companion volume to "Stories from the Old Testament," by the same author.

The Student's Prayer Book. The Text of Morning and Evening Prayer and Litany. By W. H. FLECKER, M.A., D.C.L., Headmaster of the Dean Close School, Cheltenham. With Notes. Crown 8vo, 2s. 6d.

An edition arranged for the Local Examinations. The Notes are at the foot of the page, and so arranged that they are on the same page as the text to which they refer, thus avoiding the necessity of constantly turning over the pages.

An English Church History for Children. By MARY E SHIPLEY. With a Preface by WILLIAM E. COLLINS, D.D., late Bishop of Gibraltar. Three Volumes, crown 8vo, 2s. 6d. net each.

Vol. I., A.D. 597-1066, with 12 Illustrations and 3 Maps.

Vol. II., A.D. 1066-1500, with 12 Illustrations and 1 Map.

Vol. III., A.D. 1500-1911, with Maps and 12 Illustrations.

"This instructive little book is very well written, and furnished with a good index, and rendered attractive by beautiful illustrations"—*Record*.

DOMESTIC SCIENCE

Millinery, Theoretical and Practical By CLARE HILL. Fifth Edition. Crown 8vo, 2s. [*Textbooks of Technology*]

A treatise, concise and simple, containing all required for the City and Guilds of London Examination, and providing a suitable course for evening classes.

Instruction in Cookery. By A. P. THOMPSON, Instructress to the London County Council. With 10 Illustrations. Crown 8vo, 2s. 6d. [*Textbooks of Technology*]

The most suitable form of syllabus and the best practical examples for demonstration are discussed at some length.

How to make a Dress. By J. A. E. WOOD. Fifth Edition. Crown 8vo, 1s. 6d. [*Textbooks of Technology*]

A short textbook based on the syllabus of the City and Guilds of London Institute Examination.

ENGLISH

Grammar, Dictation, and Composition

A First Course in English. By W. S. BEARD. Crown 8vo, 1s. 6d.
[*Beginner's Books.*]

This book is a working class-book in English for the Lower Forms of Secondary Schools and pupils in Primary Schools. First, it provides, side by side, a progressive course in analysis and elementary composition, the use of words and their relation to each other in sentences. The exercises for practice are very numerous, varied, and carefully graduated; many exercises are adapted for oral composition. Second, it provides a textbook of the leading principles of grammar—accidence and elementary syntax—which will enable young pupils to apply these principles intelligently, step by step, to practical work in analysis and parsing. The book is specially suitable as an introductory course to "A Junior English Grammar," by W. Williamson. Sets of Examination Questions are included which will furnish useful preparation for the Oxford and Cambridge Preliminary and the College of Preceptors Examinations; also for pupils in Primary Schools preparing for County Council Scholarships.

A Junior English Grammar. By W. WILLIAMSON, B.A. With numerous passages for Parsing and Analysis, and a chapter on Essay Writing. Fourth Edition. Crown 8vo, 2s. [Junior School Books.]

In this book the author, while following the lines usually adopted, restates many of the Definitions, reducing their number as far as possible. He endeavours to simplify the classification of the parts of speech, and pays considerable attention to the Gerund. To give freshness and a sense of reality to the subject, the examples in illustration of rules are taken from the everyday life of young people.

Junior English. By F. J. RAHTZ, M.A., B.Sc., Senior Lecturer at Merchant Venturers' Technical College, Bristol. Sixth Edition. Crown 8vo, 1s. 6d.

This book is intended for the Lower Forms of Secondary Schools. It deals with Grammar, the Construction of Phrase and Sentence, Analysis, Parsing, Expansion, Condensation, Composition, and Paraphrasing, and many other Exercises in the use of English. The Questions and Exercises are numerous and varied.

Higher English. By F. J. RAHTZ, M.A., B.Sc. Sixth Edition. Crown 8vo, 3s. 6d.

This book provides a much-needed course in the study of modern English, suitable for pupils in the Upper Forms of Secondary Schools. Examination Papers set recently at London University are added.

English Composition. By F. J. RAHTZ, M.A., B.Sc. Crown 8vo, 1s. 6d.

This work is intended for pupils of Secondary Schools and private students. It supplies a progressive course in English Composition, embracing not only essays and letters but also other important and useful work in writing English. Numerous and varied exercises are appended to each chapter, while questions and shorter exercises, many of which may be used orally, are introduced in the text. The importance of connecting the student's composition with his reading has been borne in mind throughout.

English Composition from Models. By C. ROONEY, B.A., LL.B. Crown 8vo, 2s. 6d.

This book is an attempt to apply the Direct Method to the teaching of English Composition. The models range from Bacon to Stevenson, and the extracts, which have been carefully selected, are calculated to interest senior

students. Emphasis is laid on the fact that to write we must read and that to read with profit we must be interested. "All literary skill is based upon imitation." The book deals in an interesting way with certain inherent difficulties, and has useful hints as to how the literary taste of young people may be developed and guided. It is the work of a practical teacher.

- A Class-Book of Easy Dictation and Spelling.** Selected by W. WILLIAMSON, B.A. Ninth Edition. Fcap. 8vo, 1s.

[*Beginner's Books.*

This book contains many interesting passages from English classics chosen on account of the large number of everyday words which they contain.

- A Class-Book of Dictation Passages.** Selected by W. WILLIAMSON, B.A. Sixteenth Edition. Crown 8vo, 1s. 6d. [*Junior School Books*
160 passages chosen from a wide field of modern literature on account of the large number of words they contain

- Junior English Examination Papers.** By W. WILLIAMSON, B.A. Second Edition. Fcap. 8vo, 1s. [*Junior Examination Series.*

This book contains Seventy-two Papers of Ten Questions each, and will be found to meet the requirements of all the Examinations in English usually taken in Schools up to the Senior Locals."

Literature

- English Literature for Schools** By E. E. FIRTH, History Mistress at the High School, Croydon, Author of "A First History of Greece." With 4 Maps. Crown 8vo, 2s. 6d. [*Junior School Books*

This excellent Introduction to English Literature has five special features:—(1) By comparison the style and importance of the various writers are shown. (2) Many illustrations of their works help the reader to a knowledge of the great writers. (3) Difficulties are explained by footnotes. (4) Short summaries of the chief historical events are given with explanations of the political, social, and religious tendencies of the times. Thus the reader realises that all great writers are representative of their generation. (5) Useful Maps have been included, which show the local environment of the great writers

At the end of each chapter are to be found summaries, sets of questions, and also suggestions for further reading.

- A Short Story of English Literature.** By EMMA S. MELLOWS Crown 8vo, 3s. 6d.

The story of the beginning and growth of English literature told in a very simple form for schools and the home. In addition to describing the literature and writers, some space is given to describing the character of the age under consideration

- English Literature.** By F. J. RAHTZ, M.A., B.Sc. Crown 8vo, 2s. 6d.

This work is suitable for pupils in the Upper Forms of Secondary Schools, and also for older students. Its aim is to review in a general but critical manner the groundwork of English Literature. Special attention has therefore been paid to the course of the development of our literature; the general characteristics of each period and the external influences bearing upon it are carefully explained. The work and style of the greater authors are discussed in some detail, and brief illustrative extracts from their works are given, lesser authors are treated in due proportion. Questions, many of which are suggestive and require further thought and study, are appended to each chapter.

The book will be found useful for such examinations as the Cambridge Senior Local and London Matriculation, and will form an excellent foundation for more advanced examinations.

Selections from English Literature. Vol I (1350-1700). By F. J. RAHTZ, M.A., B.Sc. Crown 8vo, 2s.

It is important for the student to have a first hand acquaintance with the authors themselves beyond what may be obtained from the brief extracts given in the English Literature above described. For this purpose two volumes of Selections, uniform with the "English Literature," have been prepared. The present volume covers the period from 1350 to 1700. Extracts are given from prose, poetry, and the drama. In dealing with verse, complete poems have been given where space would permit, and in the case of the drama, prose, and longer poems, the extracts are such as should be intelligible by themselves or with the aid of brief prefatory notes. As a rule, the space devoted to an author is in proportion to his importance.

Selections from English Literature Vol. II. (1700-1900) By H. N. ASMAN, M.A., B.D., Second Master of Owen's School, Islington. Crown 8vo, 2s.

This is the second of two volumes of selections that have been prepared for use with "English Literature," by F. J. Rahtz, M.A., B.Sc.

The period covered is 1700 to the present day. The extracts from prose, poetry, and drama have been chosen to illustrate the various aspects of the work of the leading authors, and the general development of the literature of the period. Care has been taken that the selections should all be thoroughly worth studying.

The Story of Milton's "Paradise Lost" Narrated for the most part in the actual words of the Poet. Arranged by GEORGE CARTER, M.A., Headmaster of New College School, Oxford. Crown 8vo, 1s 6d.

The main feature of this book is that the story of "Paradise Lost" is narrated for the most part in the actual words of the poet, but where this was found to be impracticable, short original passages are introduced to preserve the continuity of the story. Most of the classical and other allusions, which contribute little or nothing to the development of the story, are omitted. Concise footnotes are added to explain difficult or obsolete words.

The book is prefaced with a "Short Sketch of the Life and Works of Milton," and a Synopsis of "Paradise Lost" is also added.

Poetry

An Easy Poetry Book. Selected and Arranged by W. WILLIAMSON, B.A. Second Edition. Crown 8vo, 1s. [*Beginner's Books.*]

A little book for pupils of twelve or thereabouts. It is believed that all the selections are good as poetry, healthy and invigorating in thought, and suited to the capacity of beginners.

Ballads of the Brave: Poems of Chivalry, Enterprise, Courage, and Constancy. From the Earliest Times to the Present Day. By F. LANGBRIDGE, M.A., D.Litt., Canon of St. Munchin's, St. Mary's Cathedral, Limerick. Fourth and Revised Edition, with Notes. Crown 8vo, 3s. 6d.

In this new edition Canon Langbridge has replaced all outworn matter by new poems, carrying the story and the interest down to the present hour. In addition to the best chivalric verse of Scott, Byron, Campbell, Keats, Tennyson, Browning, Macaulay, Aytoun, Kingsley, William Morris, Sir F. Hastings Doyle, the edition includes many copyright poems in praise of gallant thought or gallant deeds by the Poet Laureate, Watts-Dunton, George Barlow, Conan Doyle, Owen Seaman, Kipling, Newbolt, Noyes. It is a book for all who love and are proud of England, for all who love chivalry, adventure, and gallant pastime; pre-eminently, it is a book for high-spirited boys. It begins with the "Siege of Troy" and ends with a "Song of Federation," a call to the Boy Scouts, and England's claim to wield for ever "The Sceptre of the Sea." Careful notes, historical, critical, philological, are given separately from the text.

Readers

The Rose Reader. By EDWARD ROSE. With numerous Illustrations, some of which are Coloured. Crown 8vo, 2s 6d And in Four Parts. Parts I. and II., 6d. each; Part III., 8d.; Part IV., 10d. Introduction for the Teacher separately, 6d.

A reader on a new and original plan. The distinctive feature of this book is the entire avoidance of irregularly-spelt words until the pupil has mastered reading.

Tommy Smith's Animals. By EDMUND SELOUS. With 8 Illustrations by G. W. ORD. Eleventh Edition. Fcap. 8vo, 1s. 6d.

This new and charming continuous reader, besides inculcating kindness to animals, conveys much natural history information. The animals dealt with are—frog, toad, rook, rat, hare, grass-snake, adder, peewit, mole, woodpigeon, squirrel, barn-owl.

An edition in a superior binding, suitable for prizes, is also issued at 2s 6d

Tommy Smith's Other Animals. By EDMUND SELOUS. With 12 Illustrations by AUGUSTA GUEST Fifth Edition Fcap 8vo, 1s 6d.

Uniform with the above. The animals dealt with are—rabbit, nightjar, weasel, blackbird, thrush, hedgehog, dabchick, moorhen, woodpecker, fox, cuckoo, watervole.

An edition in a superior binding, suitable for prizes, is also issued at 2s 6d

Health Readings for Elementary Schools. Vol. I. By C. J. THOMAS, M.B., B.Sc., D.P.H., University Scholar in Medicine, Member of the Examining Board of the Royal Sanitary Institute Crown 8vo, 1s 6d.

The first volume of a new series of Health Readers written in accordance with the recommendations of the Board of Education. It treats the subject in a simple way as a part of Nature Study, and deals with questions of health from the point of view of the natural interests of the child in his surroundings.

Health Readings for Elementary Schools. Vol. II. By C. J. THOMAS, M.B., B.Sc., D.P.H. Crown 8vo, 1s 6d.

Uniform with the above. Vol I. has dealt with the simple rules of healthy living. The second volume treats in fuller detail with the mechanisms of life and gives a rational basis for the laws of health which have already been presented.

A Health and Temperance Reader. By H. MAJOR, B.A., B.Sc., Inspector to the Leicester Education Committee. Crown 8vo, 1s.

In diction and style suitable for children in Standards V, VI., and VII. in Elementary Schools.

The Baring-Gould Selection Reader. By S. BARING-GOULD, M.A. Arranged by G. H. ROSE. With 15 Illustrations and a Map. Crown 8vo, 1s. 6d.

The Baring-Gould Continuous Reader By S. BARING-GOULD, M.A. Arranged by G. H. ROSE. With 5 Illustrations and a Map. Crown 8vo, 1s. 6d.

Two readers for Upper Standards, from the novels and topographical works of Mr Baring-Gould.

A London Reader for Young Citizens.

[See under "Civics."]

For further Readers see Messrs Methuen's Stories, in the following Series, "Stories from the Histories," "Stories from Old Romance," "Stories from the Great Writers," "The Beginner's Books," "New Historical Series" They cover a wide ground, avoid hackneyed material, and aim at a high standard of style and treatment, so that they may be used by Secondary Schools and the

Upper Standards of Elementary Schools. The Volumes are 1s 6d. each (with one exception) and include the following —

- Stories from Ancient History.** By E. BOWYER.
Stories from Modern History. By E. M. WILMOT-BUXTON.
Stories from Roman History. By E. M. WILMOT-BUXTON.
Easy Stories from English History. By E. M. WILMOT-BUXTON, 1s.
Stories from French History. By TAYLOR DYSON.
Tales from Irish History. By ALICE BIRKHEAD.
Stories from Old French Romance. By E. M. WILMOT-BUXTON.
Stories from Old Italian Romance. By SUSAN CUNNINGTON.
Stories from Old English Romance. By JOYCE POLLARD.
Stories from Dickens. By JOYCE COBB.
Stories from Bunyan. By EDITH L. ELIAS.
Stories from Chaucer. By ADA HALES.
Stories from the Earthly Paradise. By EDITH L. ELIAS.
Stories from the Old Testament. By E. M. WILMOT-BUXTON.
Stories from the New Testament. By E. M. WILMOT-BUXTON.

FRENCH Grammars, etc.

- A First Year Intuitive French.** By M. VERDON, Modern Language Master at Rotherham Grammar School. Crown 8vo, 2s.

This book is intended for children between the ages of twelve and fourteen in Secondary Schools. It aims at teaching elementary French according to the "New" or "Direct" Method, and follows the lines of moderate Reformers. It is divided into thirty-six lessons, providing ample material for a whole year's work. Each lesson, with the exception of a few made of songs and rhymes, consists of a reading piece, which is the résumé of several conversation lessons, drill exercises for oral practice, questions and written exercises. The latter form an Introduction to free composition in French. The grammar evolved from each piece is systematically given in another part of the book. Its vocabulary of about eleven hundred words is simple, practical and useful.

- A Junior French Grammar.** By L. A. SORNET and M. J. ACATOS. Modern Language Masters at King Edward's School, Birmingham. Third Edition, Revised. Crown 8vo, 2s. [*Junior School Books.*]

This book comprises a complete course of French Grammar, with Exercises and Examination Papers suitable for candidates preparing for the Oxford and Cambridge Local and College of Preceptors' Examinations. It also includes numerous Vocabularies and materials for Conversation Lessons.

- Nouvelle Grammaire Française, à l'usage des écoles Anglaises.** By J. G. ANDERSON, B.A., Examiner to London University. Cr 8vo, 2s.

A textbook for Middle and Higher Forms, written in French, with the exception of a long introduction on Phonetics. Emphasis is laid on points where English and French differ. The conjugation of the verb is simplified, and there are many other special features.

- Exercices de Grammaire Française.** By J. G. ANDERSON, B.A., Crown 8vo, 1s. 6d.

This book of exercises is primarily intended as a companion volume to the "Nouvelle Grammaire Française," but there is no reason why it should not be used in conjunction with any grammar. These books cover all the ground for the London Matriculation.

- A Junior French Prose.** By R. R. N. BARON, M A., Modern Language Master at Cheltenham Grammar School. Fourth Edition. Crown 8vo, 2s.

[*Junior School Books*

This book has been written for pupils beginning continuous French Prose. It contains (1) Examples and Rules in Syntax. These are not professedly exhaustive, but deal rather with points in which the two languages are seen to differ, and, as they deal with such points occurring in over a hundred passages and exercises, it is hoped they may be found sufficiently complete for the general purposes at which the book aims. (2) Exercises in everyday language, illustrative of the rules. (3) Graduated continuous passages

- French Prose Composition.** By R. R. N. BARON, M A., Fourth Edition. Crown 8vo, 2s 6d. Key, 3s net.

A collection of passages from standard English authors for composition in Upper Forms and by Army Candidates, Notes and Vocabularies are provided.

- French and English Parallels.** By F. R. M. FURSDON. Fcap. 8vo, 3s 6d net.

The first part of this volume consists of a selection of French and English idiomatical phrases and idioms, and the second of over a thousand examples of French and English metaphors. The third section is an interwoven sequence of ideas, expressed by means of some of the most beautiful maxims and proverbs of both languages.

- Junior French Examination Papers,** in Miscellaneous Grammar and Idioms. By F. JACOB, M A., Assistant Master at Felsted School. Third Edition. Fcap. 8vo, 1s.

[*Junior Examination Series.*

A collection of 72 papers of ten questions each suitable for class teaching and revision work for the Local and similar Examinations.

- A Manual of French Commercial Correspondence.** By S. E. BALLY. With Vocabulary. Fourth Edition. Crown 8vo, 2s.

[*Commercial Series.*

This book provides the student with materials for French correspondence. Almost every paragraph has been taken from actual letters.

- A French Commercial Reader.** By S. E. BALLY. With Vocabulary. Second Edition. Crown 8vo, 2s

[*Commercial Series.*

A series of extracts chosen from the best sources, containing an unusually large number of business terms.

By A. M. M. Stedman, M.A.

- Steps to French.** Ninth Edition. 18mo, 8d.

One of the easiest French books in existence. Contains both grammar and exercises.

- First French Lessons** Tenth Edition. Crown 8vo, 1s.

A short course for beginners written to make a boy's knowledge of Latin help his French.

- Easy French Passages for Unseen Translations.** Sixth Edition. Fcap. 8vo, 1s. 6d.

Many of the passages have been actually set at the Local, Public School and Naval Academy Examinations. Some of the most charming French lyrics are included

- Easy French Exercises on Elementary Syntax.** With Vocabulary. Fourth Edition. Crown 8vo, 2s. 6d. Key, 3s. net.

These exercises are for pupils who have mastered their accidence and require a more advanced book to accompany their Syntax.

French Vocabularies for Repetition. Arranged according to Subjects. Fourteenth Edition. Fcap. 8vo, 1s.

A collection of upwards of 2000 words arranged in sets of 12 each, according to the subject.

French Examination Papers in Miscellaneous Grammar and Idioms. Fifteenth Edition. Crown 8vo, 2s. 6d. Key (Sixth Edition), issued to Tutors and Private Students only, 6s. net.

These Papers have been compiled for those who have passed beyond the Elementary Stages of Grammar. They cover the whole of the ground usually taught.

Texts

Easy French Rhymes. By HENRI BLOUET. Illustrated. Second Edition. Fcap. 8vo, 1s. [*Beginner's Books.*]

This little book, containing the time-honoured English nursery rhymes translated into French rhyme, will supply children with a fairly extensive and easily acquired vocabulary of French words. The English and French versions are given on opposite pages.

Simplified French Texts

Edited by T. R. N. CROFTS, M.A.,
Headmaster of Roan School, Greenwich.

This Series, consisting of 16 volumes, provides pupils who have been studying French about two or three years with simple translation books which they can understand, and at the same time complete stories, instead of a succession of little anecdotes. It thus makes possible the more rapid reading of a greater variety of authors. Vocabularies have been added, in which the chief idioms are explained. Each volume is Fcap. 8vo, 1s.

L'Équipage de la Belle-Nivernaise. By ALPHONSE DAUDET. Adapted from "La Belle-Nivernaise," by T. R. N. CROFTS, M.A. Third Edition.

L'Histoire de Pierre et Camille. By ALFRED DE MUSSET. Adapted from "Pierre et Camille," by J. B. PATTERSON, M.A., Modern Language Master at Merchant Taylors' School, London.

Mémoires de Cadichon. By MADAME DE SÉGUR. Adapted from "Mémoires d'un Âne," by J. F. RHOADES, Modern Language Master at Fettes College, Edinburgh.

L'Histoire d'une Tulipe. By ALEXANDRE DUMAS. Adapted from "La Tulipe Noire," by T. R. N. CROFTS, M.A. Third Edition.

La Bouillie au Miel. By ALEXANDRE DUMAS. Adapted from "La Bouillie de la Comtesse Berthe," by P. B. INGHAM, B.A., Modern Language Master at Merchant Taylors' School, London.

Edmond Dantès. By ALEXANDRE DUMAS. Adapted from "Monte Cristo," by M. CEPPI, Head Modern Language Master at King's College School, Wimbledon.

D'Ajaccio à Sainte-Hélène. By ALEXANDRE DUMAS. Adapted from "Napoleon," by F. W. M. DRAPER, Modern Language Master, City of London School.

M. de Beaufort à Vincennes. By ALEXANDRE DUMAS. Adapted from "Vingt Ans Après" by P. B. INGHAM, B.A.

- Le Docteur Mathéus.** By ERCKMANN-CHATRIAN. Adapted from "L'Illustre Docteur Mathéus," by W. P. FULLER, M.A., Headmaster of the Holborn Estate Grammar School, London.
- Le Conscrit de 1813.** By ERCKMANN-CHATRIAN. Adapted from "L'Histoire d'un Conscrit," by H. RIEU, M.A., Modern Language Master at Merchant Taylors' School, London.
- La Bataille de Waterloo.** By ERCKMANN-CHATRIAN. A Sequel to the above. Adapted from "Waterloo," by G. H. EVANS, M.A., Modern Language Master at Oundle School.
- Jean Valjean.** By VICTOR HUGO. Adapted from "Les Misérables," by F. W. M. DRAPER, M.A., Modern Language Master at King's College School, Wimbledon.
- Abdallah.** By EDOUARD LABOULAYE. Adapted from "Abdallah, ou le tréfil à quatre feuilles," by Mrs. J. A. WILSON.
- Deux Contes.** By P. MÉRIMÉE. Adapted from "Mateo Falcone" and "Tamango," by J. F. RHODES.
- La Chanson de Roland.** Adapted by H. RIEU, M.A. Second Edition.
- Remy, Le Chevrier.** By EMILE SOUVESTRE. Adapted from "Le Chevrier de Lorraine," by E. E. CHOTTIN, B.-es-L., Modern Language Master at St. Laurence College, Ramsgate.

Advanced French Texts

Edited by T. R. N. CROFTS, M.A.

Headmaster of Roan School, Greenwich.

This series aims at supplying translation books for fairly rapid class-reading among pupils who have already been through some of the volumes in the Simplified Texts, or who have acquired a good working knowledge of elementary French. The first volumes are —

- Bernard de Mergy.** By P. MÉRIMÉE. Adapted by P. B. INGHAM, B.A., Assistant Master at Merchant Taylors' School. Crown 8vo, 2s.

This is a condensation of Prosper Mérimée's one historical novel, "Chronique du Règne de Charles IX.," considered the best of its type in the French language. Passages have been omitted, but no changes have been made in the text.

- Ursus et sa Troupe.** Adapted from "L'Homme qui Rit," of Victor Hugo, by EM. B. LE FRANÇOIS, French Tutor at Redcliff House, Clifton, and Wolsey Hall, Oxford. Crown 8vo, 2s.

A complete and exciting story, divided into twenty chapters. Each chapter becomes a theme for conversation, by means of questions based upon it. There is a vocabulary of difficult words and idiomatic expressions.

GENERAL INFORMATION

- General Knowledge Examination Papers.** By A. M. M. STEDMAN, M.A. Seventh Edition. Crown 8vo, 2s. 6d. **Key** (Fourth Edition), issued to Tutors and Private Students only, 7s. net.

[School Examination Series.]

Compiled to furnish practice for those who are preparing for Scholarships at the Public Schools and at the Universities. This edition has been carefully revised and brought up to date by Mr. C. G. BOTTING, B.A., and a number of new questions have been added.

Junior General Information Papers. By W. S. BEARD. Fcap. Svo, 1s. Key, 3s. 6d. net. [*Junior Examination Series.*]

An easier book on the same lines as Stedman's "General Knowledge Examination Papers." It will be found suitable for the Junior Examinations and Candidates for County Scholarships

GEOGRAPHY

A Systematic Geography of the World

By G. W. WEBB, B.A.,
Master at Owen's School, Islington.

This series provides for a study of the Geography of the World on logical lines as recommended by the Board of Education. It is intended for those who have passed beyond the elementary stages of the subject and wish to acquire a more detailed and advanced knowledge. Emphasis is placed on the distinctive character of the natural regions by a consideration of geological structure and its bearing on physical features, and again constant reference is made to the causal connection between the facts of physical and political geography. The books will be found suitable for use in the Middle and Upper Forms of Secondary Schools and for all who wish to prepare for the Oxford and Cambridge Local the London Matriculation, and similar examinations.

A Systematic Geography of the British Isles. With 13 Diagrams and Maps. Crown 8vo, 1s.

A Systematic Geography of Europe. With 5 Diagrams and Maps. Crown 8vo, 1s.

A Systematic Geography of Asia. With 8 Diagrams and Maps. Crown 8vo, 1s.

A Systematic Geography of America. With 10 Maps and Diagrams. Crown 8vo, 1s.

A Systematic Geography of Africa, Australia, and Polynesia. With Maps and Diagrams. Crown 8vo, 1s.

By Road and River. A Descriptive Geography of the British Isles. By E. M. WILMOT-BUXTON, F.R.Hist.S. With 12 Illustrations and 12 Maps. Crown 8vo, 2s.

Suitable for children in the Lower Forms of all grades of schools. It aims at making them familiar with the scenery and most striking features, political, historical, and literary, of their land by the natural and interesting process of making imaginary journeys through the different districts of these islands. Physical geography has been closely connected with political aspects, and throughout an appeal has been made to the common sense as well as to the imagination of the child. Interesting questions are set at the end of each chapter, and the text is fully illustrated by photographs and outline maps.

The Dominion of Man. Geography in its Human Aspect. By E. PROTHEROE. With 36 Illustrations. Second Edition. Crown 8vo, 2s.

A bright and readable geographical textbook for teachers and upper classes, dealing mainly with the way in which life is affected by its surroundings and conditions. Many interesting particulars are given of manufactures and industries. It contains thirty-six full-page illustrations beautifully printed in double tone ink.

- A Commercial Geography of the British Empire.** By L. W. LYDE, M.A., Professor of Economic Geography at University College, London. Ninth Edition. Crown 8vo, 2s. [*Commercial Series.*]

The first section gives the general principles of the science and their application to the larger areas of the British Empire. The second section takes each of the Colonies and considers its surroundings, fisheries, harbours, surface, agriculture, and minerals separately.

- A Commercial Geography of Foreign Nations.** By F. C. BOON, B.A., Assistant Master at Dulwich College. Crown 8vo, 2s. [*Commercial Series.*]

A companion volume to Prof. L. W. Lyde's "Commercial Geography of the British Empire."

- A Historical Geography of the British Empire.** By HEREFORD B. GEORGE, M.A., Fellow of New College, Oxford. Fourth Edition, Revised. With Map. Crown 8vo, 3s. 6d.

The purpose of this work is twofold—to describe in outline the British Empire, with its component parts so grouped as to show forth the diversity of their relations to the mother country—and to point out the nature of the relations between the geography and the history of the British Islands, from the beginning, and from the time of their becoming British in the case of the other possessions.

- Historical and Modern Atlas of the British Empire.** Specially prepared for Students. By C. GRANT ROBERTSON, M.A. (OXON.), and J. G. BARTHOLOMEW, F.R.S.E., F.R.G.S. Demy Quarto, 4s. 6d. net.

The Atlas contains 64 Maps, with numerous insets, Historical Tables and Notes, an Introduction, a Historical Gazetteer, a Bibliography, and an Index. The combination of modern maps on physical geography, trade, industry, etc., with the special and extensive historical maps of the Empire as a whole and of each part of it (e.g. India, Canada, etc.), give the Atlas a character and completeness not hitherto offered by any other Atlas.

- Junior Geography Examination Papers.** By W. G. BAKER, M.A. Fcap. 8vo, 1s. [*Junior Examination Series.*]

72 Papers each containing 10 questions, covering all branches of the subject required by pupils of 12 to 16 years. By an ingenious arrangement the papers can be used either as general papers or to test some particular part of the subject.

- History and Geography Examination Papers.** By C. H. SPENCE, M.A., Assistant Master at Clifton College. Third Edition. Crown 8vo, 2s. 6d. [*School Examination Series.*]

The present edition was practically rewritten and a large number of new questions added.

GERMAN

Grammars, etc.

- A Junior German Grammar.** By H. C. A. SECKLER, Senior German Master, Owen's School, E.C. Crown 8vo, 2s. 6d. [*Junior School Books.*]

This book is for the Middle Forms of schools, and meets the requirements of the Oxford and Cambridge Junior Local and the College of Preceptors Examinations. It consists of grammar and exercises, and a particular feature is the co-ordination of accidence and syntax. It aims throughout at training pupils to use their knowledge for composition. The latter part of the book gives various examination papers, with some useful model solutions.

German Passages for Unseen Translation. By E. M'QUEEN GRAY. Crown 8vo, 2s 6d.

A selection of passages from standard authors for the use of Middle and Upper Forms. No notes or vocabularies are included.

German Vocabularies for Repetition. By SOPHIE WRIGHT. Fcap. 8vo, 1s 6d.

A collection of useful German words arranged under subjects.

A German Commercial Reader By S. E. BALLY. With Vocabulary. Crown 8vo, 2s. [*Commercial Series.*]

The object of this manual is not only to offer the student material for translation, but to bring to his notice some practical hints on commerce, industry, and commercial history and geography. Roman type and the new spelling have been adopted in this book.

A Manual of German Commercial Correspondence. By S. E. BALLY. With Vocabulary. Second Edition. Crown 8vo, 2s. 6d. [*Commercial Series.*]

The specimen letters which illustrate the chapters are preceded by analyses and followed by numerous exercises, each containing in a few German words the gist of the letter to be composed. Roman type and the new spelling have been adopted in this book.

German Examination Papers in Miscellaneous Grammar and Idioms. By R. J. MORICH, late of Clifton College. Eighth Edition. Cr. 8vo, 2s. 6d. **Key**, Third Ed., 6s. net. [*School Examination Series.*]

A series of Advanced Papers compiled—(1) to avoid the tediousness and length of constant grammar repetition, and (2) to make the student acquainted with some, at least, of the endless number of German idiomatic phrases.

Junior German Examination Papers in Miscellaneous Grammar and Idioms. By A. VOEGELIN, M.A., Modern Language Master at St. Paul's School. Fcap 8vo, 1s. [*Junior Examination Series.*]

An easier book, on the same lines as German Examination Papers.

Texts

Simplified German Texts

Edited by T. R. N. CROFTS, M.A.,
Headmaster of Roan School, Greenwich.

The aim of this Series is to provide pupils who have been studying German about two or three years with simple translation books which they can understand, and which at the same time provide complete stores, instead of a succession of little anecdotes. Vocabularies have been added, in which the chief idioms are explained. Each volume is fcap. 8vo, 1s.

Der Müller am Rhein. By C. BRENTANO. Adapted from "Das Märchen von dem Rhein und dem Müller Radlauf," by Miss A. F. RYAN, Modern Language Mistress at the High School, Derby.

Die Geschichte von Peter Schlemihl. By A. VON CHAMISSE. Adapted from "Peter Schlemihl's wundersame Geschichte," by R. C. PERRY, M.A., Modern Language Master at Merchant Taylors' School, London.

Undine und Huldbrand. By DE LA MOTTE FOUQUÉ. Adapted from "Undine," by T. R. N. CROFTS, M.A.

Die Nothelfer. By W. H. RIEHL. Adapted from "Die Vierzehn Nothelfer," by P. B. INGHAM, B.A., Modern Language Master at Merchant Taylors' School, London.

Simplified German Unseens. By T. R. N. CROFTS, M.A.

GREEK

Grammars, Exercises, etc.

Easy Greek Exercises By C G BOTTING, B.A., Assistant Master at St. Paul's School. Crown 8vo, 2s.

These exercises have been compiled to accompany Stedman's "Shorter Greek Primer," from which the rules have, by permission, been for the most part taken.

Passages for Unseen Translation. By A. M. COOK, M.A., Assistant Master at St. Paul's School, and E. C. MARCHANT, M.A., Tutor of Lincoln College, Oxford. Selected from Latin and Greek Literature. Fifth Edition. Crown 8vo, 3s. 6d.

Two hundred Latin and two hundred Greek passages, arranged in order of increasing difficulty. The book has been carefully compiled to meet the wants of V and VI. Form boys at the Public Schools, and is also well adapted for the use of honoursmen at the Universities. Prose and verse alternate throughout.

Notes on Greek and Latin Syntax. By G. BUCKLAND GREEN, M.A., Assistant Master at Edinburgh Academy. Second Edition, Revised. Crown 8vo, 3s. 6d.

The book discusses and explains the chief difficulties of Greek and Latin Syntax, so as to afford a preparation for the higher classical examinations. The treatment throughout is comparative. There are chapters on the cases, tenses, moods, and their uses, on Homeric peculiarities, the article, etc., and, besides the examples quoted in illustration of the text, numerous passages are added, by working through which the student may obtain practice in dealing with points of syntax.

By A. M. M. Stedman, M.A.

Steps to Greek. Fourth Edition. 18mo, 1s.

Easy Lessons on Elementary Accidence, with exercises and vocabularies.

A Shorter Greek Primer Revised by C. G. BOTTING, M.A. Fourth Edition. Crown 8vo, 1s. 6d.

This book contains the elements of Greek Accidence and Syntax.

Easy Greek Passages for Unseen Translation Revised by C. G. BOTTING, M.A. Fifth Edition. Fcap. 8vo, 1s. 6d.

The pieces are graduated in length and difficulty, and the early pieces present no serious obstacles.

Greek Vocabularies for Repetition. Revised by C. G. BOTTING, M.A. Fifth Edition. Fcap. 8vo, 1s. 6d.

A collection of over 2000 useful words arranged in sets of twelve each according to subjects.

Greek Examination Papers in Miscellaneous Grammar and Idioms. Tenth Edition. Crown 8vo, 2s. 6d. **Key** (Fourth Edition), issued to Tutors and Private Students only, 6s. net.

[*School Examination Series.*]

A collection of Advanced Papers.

Junior Greek Examination Papers. By T. C. WEATHERHEAD, M.A., Headmaster of King's College Choir School, Cambridge. Fcap. 8vo, 1s.

A volume of 72 Junior Papers.

[*Junior Examination Series.*]

Examination Papers on Thucydides. By T. NICKLIN, M.A., Assistant Master at Rossall School. Crown 8vo, 2s.

In this volume the eight books have been divided into short sections, and a paper has been set on each section, as well as recapitulatory papers on each book.

Texts

Aristotle.—THE ETHICS OF ARISTOTLE. Edited, with an Introduction and Notes, by JOHN BURNET, M.A., Professor of Greek at St Andrews. Cheaper issue. Demy 8vo, 10s. 6d. net.

An elaborate edition, based on the assumption that the Nicomachean Ethics is the authentic work of Aristotle, and that it has hardly suffered from interpolation or dislocation. It is also assumed that the Eudemian Ethics is our most authoritative commentary, and the parallel passages from it are printed under the text to which they refer. The commentary shows that most of the difficulties which have been raised disappear when the work is interpreted in the light of Aristotle's own rules of Dialectic.

Demosthenes —AGAINST CONON AND CALLICLES. Edited by F DARWIN SWIFT, M.A. Second Edition. Fcap. 8vo, 2s.

The new text edited for Middle and Upper Forms, with vocabulary and notes

Greek Testament Selections. With Introduction, Notes, and Vocabulary, by A M M. STEDMAN, M.A. Fourth Edition. Fcap. 8vo, 2s. 6d.

This small volume contains a selection of passages, each sufficient for a lesson, from the Gospels, forming a life of Christ. In schools where only a limited time can be given to the study of the Greek Testament an opportunity is thus supplied for reading some of the most characteristic and interesting passages.

Translations

Æschylus.—AGAMEMNON, CHOEPHORE, EUMENIDES. Translated by LEWIS CAMPBELL, LL.D. Crown 8vo, 5s.

[*Classical Translations*

Lucian.—SIX DIALOGUES (Nigrinus, Icaro-Menippus, The Dream, The Ship, The Parasite, The Lover of Falsehood). Translated by S. T. IRWIN, M.A., Assistant Master at Clifton. Crown 8vo, 3s. 6d.

[*Classical Translations.*

Sophocles.—AJAX AND ELECTRA. Translated by E D. A. MORSEHEAD, M.A. Crown 8vo, 2s. 6d.

[*Classical Translations*

HISTORY

Classical

Stories from Ancient History. By E. BOWYER, B.A., B.Sc., Assistant Master, Owen's School, Islington. With 2 Maps. Crown 8vo, 1s. 6d.

[*New Historical Series*

This volume—the first of a new historical series on the lines of the recent circular of the Board of Education on the teaching of History—is intended as an introduction to the story of ancient history for pupils up to the age of twelve.

In accordance with the suggestions made in the above-mentioned circular, it deals with the "chief events and characters from the history of the most important nations in their traditional form." It aims also at "giving some idea of the nature of the great nations and stages in civilisation, centred round certain individuals or events in the chronological succession" in such a way that young children shall be able at least to "place" the most notable characters of ancient history.

The Ancient World. Outlines of Ancient History for the Middle Forms of Schools. By E. M. WILMOT-BUXTON, F.R.Hist.S. With 12 Maps and 20 Illustrations. Crown 8vo, 3s. 6d.

This book tells the stories of the great civilisations of the Ancient World, as made known by recent excavation and discovery, from the dawn of Egyptian history to the days of the Roman Empire.

The Greek View of Life. By G. LOWES DICKINSON, M.A., Fellow of King's College, Cambridge. Seventh and Revised Edition. Crown 8vo, 2s. 6d. net.

A revised edition, reset in new type, of this admirable book, which is a general introduction to Greek literature and thought. Among the subjects dealt with are the Greek View of Religion, the State and its relation to the Citizen, Law, Artisans and Slaves, Sparta, Athens, Manual Labour and Trade, Athletics, Pleasure, Greek View of Women, Friendship, Art, Sculpture, Painting, Music, etc.

A First History of Greece. By EDITH E. FIRTH, History Mistress of Croydon High School. With 7 Maps. Second Edition. Crown 8vo, 1s. 6d.
[*Beginner's Books*]

This book has been written in the hope of supplying a History of Greece suitable for young children. It is written in biographical form, and those lives have been selected which best explain the rise and decline of the Greeks.

A Junior Greek History. By W. HORTON SPRAGGE, M.A., Assistant Master at City of London School. With 4 Maps and 4 Plates. Crown 8vo, 2s. 6d.
[*Junior School Books*]

It describes the main features in the history of Greece down to the time of its absorption in the Roman Empire, suitably presented for junior pupils in schools. The greater part of it is taken from ancient authorities, Greek and Latin, but the views of modern writers have also been consulted.

A Short History of Greece to the Death of Alexander the Great. By W. S. HERR, B.A., Assistant Master at Brighton College. With many Maps. Crown 8vo, 3s. 6d.

This book is intended primarily for the use of students reading for the Oxford and Cambridge Higher Certificate, and secondarily as an introduction to a wider study of the subject. An attempt has been made to render some of the recently acquired archaeological evidence accessible to those who have no expert knowledge. The recent papers set for the Higher Certificate have demanded far more than a mere collection of facts, and accordingly the present work has been written with a view to giving a general survey of the Greek race and of the broad principles underlying its history.

Stories from Roman History. By E. M. WILMOT-BUXTON, F.R.Hist.S. Third Edition. Crown 8vo, 1s. 6d.

[*Beginner's Books*]

The object of this book is to provide an introduction to the study of Roman history by a series of stories in chronological order dealing with the main events and characters of the history of Rome.

An Introduction to the History of Rome. By H. N. ASMAN, M.A., B.D., Second Master of Owen's School, Islington. With 2 Maps and 14 Illustrations. Crown 8vo, 2s. 6d.

This book gives to pupils learning Latin some knowledge of the history of the great people whose language they are studying. It has been insisted by educational authorities that some knowledge of the history of Rome is essential not only for a proper appreciation of Roman literature, but that it is also a necessary part of a complete education. This book occupies a place between the primer and the larger works on the subject. It gives a brief survey of the history of Rome to the death of Augustus. It will also be found useful for the general reader who desires some knowledge of the subject.

- A Short History of Rome to the Death of Augustus.** By J. WELLS, M.A., Fellow and Tutor of Wadham College, Oxford. With 3 Maps and 4 Plates Tenth Edition. Crown 8vo, 3s. 6d.
 "The schoolmasters who have felt the want of a fifth-form handbook of Roman history may congratulate themselves on persuading Mr. Wells to respond to it. His book is excellently planned and executed. Broken up into short paragraphs, with headings to arrest the attention, his manual does equal justice to the personal and the constitutional aspects of the story."—*Journal of Education*.
- A Constitutional and Political History of Rome.** From the Earliest Times to the Reign of Domitian. By T. M. TAYLOR, M.A., Fellow of Gonville and Caius College, Cambridge. Second Edition. Crown 8vo, 7s. 6d.
 It contains an account of the origin and growth of the Roman institutions, and a discussion of the various political movements in Rome from the earliest times to the reign of Domitian.

Modern Great Britain

- England's Story from Cæsar to Elizabeth.** By JOSIAH TURNER. With more than 50 Illustrations. Crown 8vo, 1s. 6d.
 In this book, the sub-title of which is "England on the Edge of the World," an attempt is made to show that the course of England's history has been influenced by the known geographical position of the country.
 The author holds that the Norman Conquest and the Discovery of America were the two turning-points in English history, as the first committed England to the struggle for a continental empire, and the second, by placing England in the centre of the World, was directly responsible for our present oceanic empire.
 The book is intended to be used by children of nine or ten, and the language is not beyond their comprehension.
- Easy Stories from English History.** By E. M. WILMOT-BUXTON, F.R.Hist.S. Sixth Edition. Crown 8vo, 1s. [*Beginner's Books*.]
 A historical reader arranged on the century method; that is, it aims at enabling the learner, before any detailed study is attempted, to run his eye over the centuries, and point out the main feature of each succeeding epoch. The book contains thirty-five stories, from Caradoc to Gordon, well and simply told, chosen with a view to illustrate each century.
- A Junior History of Great Britain.** By E. M. WILMOT-BUXTON, F.R.Hist.S. Crown 8vo, 1s. 6d.
 This book gives a systematic and interesting account of the history of Great Britain to pupils of ages ten to fourteen, who have hitherto studied the subject in the form of "Stories." To prevent it from being a mere outline, and in accordance with the Board of Education's Circular, many unimportant facts have been omitted, and the aim has been to give (1) a clear apprehension of the chief events in chronological sequence; (2) a fairly detailed study of those aspects which should specially appeal to young pupils. The connection of history with literature has been maintained throughout.
- A History of Great Britain.** From the Coming of the Angles to the Year 1870. By E. M. WILMOT-BUXTON, F.R.Hist.S. With 20 Maps. Second Edition. Crown 8vo, 3s. 6d.
 This book attempts to break through the conventional lines on which History Class-books are laid down. With very few exceptions these books make the reign the chapter-limit, and take each event in chronological order. In this book the old system has been entirely discarded, and each chapter will be found to deal with one great movement, which is traced in cause, events, and result. Another feature is the close connection which has been maintained throughout with European History.

Methuen's School History of England

In Three Volumes

- A History of England for Schools.** Vol. I. To 1485 By H. J. CAPE, B.Sc., F.R.Hist.S., Headmaster of the Mathematical School, Rochester Crown 8vo, 2s. 6d.

The author has endeavoured to carry out the suggestions contained in two recent and most valuable Memoranda of the Board of Education. By limiting the space devoted to the less instructive reigns, it has been possible to treat at greater length the events of outstanding importance, while the great movements of history are discussed in their European bearing and not merely from the influence which they exercised upon our own country.

It is, however, hoped that the book will satisfy the requirements of those who need a practical textbook for examination purposes.

- A History of England for Schools.** Vol. II. 1485-1714. By L. OLDERSHAW, M.A. Crown 8vo, 2s. 6d.

This volume aims at showing the position of England in Europe, and at sketching her internal development during the period when the foundations of the modern state and the Empire were being laid.

The Reformation and the counter Reformation, and England's attitude in regard to these movements, the Irish policy of the Tudors, and of Cromwell, the great struggle of the Executive and the Legislature, and the increasing attention paid to commercial problems and in foreign relations are among the larger questions dealt with in broad and simple outlines. As in the other volumes of the series, each chapter deals with a particular phase of the subject, illustrative extracts drawn from typical "sources" are added to many of the chapters, and its usefulness has been further increased by the inclusion of summaries and a biographical index.

- A Short History of Modern England.** 1714-1910. By ERNEST BOWYER, B.A., B.Sc. Crown 8vo, 2s. 6d.

This volume has been written, on modern lines, expressly for Upper Forms of Schools. In order to enable the young pupil to grasp the history of his country during the last two centuries as an intelligible whole, the economic side of England's history and the part she has played in international politics have been dealt with in greater detail than is usual in textbooks written for schools. Each chapter deals with a particular phase of the subject, illustrative extracts drawn from typical "Sources" are added to many of the chapters, and the usefulness of the volume is further increased by the inclusion of biographies and summaries.

School County Histories

Illustrated. Crown 8vo, 1s 6d each

This series is designed to enforce the idea, so all-important in young people's education, that history begins at home. The volumes are meant to bring history into connection with scenes which their readers know, to illustrate manners by local examples, and to teach that every place has its interest and its story. Maps and illustrations are freely added, and each county volume is written by an author who has made a special study of the county he treats.

- A School History of Middlesex, including London.** By VICTOR G. PLARR, M.A., and F. W. WALTON, M.A. With 45 Illustrations and a Plan of London.

- A School History of Surrey.** By H. E. MALDEN, M.A. With 4 Maps and 50 Illustrations.

School County Histories—continued

- A School History of Somerset.** By WALTER RAYMOND. With 70 Illustrations. Second Edition
- A School History of Warwickshire.** By B. C. A. WINDLE, D Sc., F.R.S., President of Queen's College, Cork. With 47 Illustrations.
- A School History of Lancashire.** By W. E. RHODES, M.A. With 3 Maps and 43 Illustrations.

- A Handy Digest of British History.** By C. E. SNOWDEN. Demy 8vo, 4s. 6d.

A guide and companion that aims at presenting a clear and easily graspable analysis of the course of events to students who are reading, and at refreshing, at a minimum cost of time and trouble, the memories of those who have read. It supplies a commentary on the more important and leading questions of each period, while it contents itself with the barest mention of episodes, the details of which can be found in most textbooks.

- English Life Three Hundred Years Ago.** Being the first two chapters of "England under the Stuarts" By G. M. TREVELYAN, M.A., late Fellow of Trinity College, Cambridge. Edited by J. TURRAL, B.A., Headmaster of the Blackpool Secondary School. Crown 8vo, 1s.

A graphic account of the state of England and English Society from 1603 to 1640.

- A Constitutional History of England.** By A. M. CHAMBERS, Honours School of Modern History, Oxford; History Mistress, Bedford High School. Second Edition. Crown 8vo, 6s

This book is meant primarily for use in the Upper Forms in schools and for Students beginning more advanced work. It deals mainly with Saxon and Feudal Organisation, and with the evolution of the Central Government out of earlier institutions. The development of each branch of the Constitution—Executive, Legislature, and Judicature—is traced separately, but, as far as possible, the history of each subject is dealt with chronologically. The difference between the English and other constitutions is examined, and its chief characteristics are pointed out, while the relationship of the several branches of the Constitution to each other, now and in the past, is shown, and an attempt is made to suggest the practical effects of the present balance of power in the State on the Constitution.

- Original Illustrations of English Constitutional History.** Comprising a Selected Number of the Chief Charters and Statutes. By D. J. MEDLEY, M.A., Professor of History in the University of Glasgow. Crown 8vo, 7s. 6d. net.

This volume covers the whole period from the Anglo-Saxon laws to the Act of Union with Ireland. University teachers have long desired such a collection in a single volume. In those already published the pieces are translated. But since the object of this selection is that it should serve as an introduction to more extended study, the documents written in French or Latin are presented in the original language, and they are annotated throughout with extracts from other original material bearing on all important points, in order that each passage may be as far as possible its own interpreter.

English Records. A Companion to the History of England. By H. E. MALDEN, M.A. Crown 8vo, 3s. 6d.

This handbook is intended to furnish the necessary basis of facts for those who are hearing historical lectures or reading history. It aims also at concentrating information upon dates, genealogies, historical geography, officials, wars, and constitutional documents which is usually only to be found scattered in different volumes.

The Industrial History of England. By H. DE B. GIBBINS, Litt D., M.A. With Maps and Plans. Seventeenth Edition, Revised. Crown 8vo, 3s.

An introduction to the subject, giving in concise and simple form the main outlines of England's economic history. As far as possible the economic questions are connected with the social, political, and military movements.

British Commerce and Colonies from Elizabeth to Victoria. By H. de B. GIBBINS, Litt D., M.A. Fourth Edition. Crown 8vo, 2s. [Commercial Series.]

A review of the history of British Commerce, written in simple and concise form, without elaborate detail.

Battles of English History. By H. B. GEORGE, M.A., Fellow of New College, Oxford. With numerous Plans. Fifth Edition, Revised. Crown 8vo, 3s. 6d.

This book is intended to give a clear general idea of all the most important Battles of English History, and, without being technical, to bring out their meaning. It is suitable for an Upper Form textbook or school prize.

Revision Notes on English History. By F. WALLACE-HADRIH, Assistant Master at Kingston-on-Thames Grammar School. Cr 8vo, 1s.

This book is not intended to supersede but rather to supplement the use of the ordinary class-book, and has been written chiefly for the use of candidates preparing for the Local Examinations. It contains a chronological analysis of the leading events of English history, together with general notes on each reign.

Examination Papers in English History. By J. TAIT WARDLAW, B.A. Crown 8vo, 2s. 6d. [School Examination Series.]
These papers are designed for candidates for a pass degree in History in the Universities, and for students taking Historical Scholarships, Army Candidates, and the ordinary work in Public Schools.

Junior History Examination Papers. By W. O. P. DAVIES. Crown 8vo, 1s. [Junior Examination Series.]

For pupils preparing for the Oxford and Cambridge Locals, College of Preceptors, and other Junior Examinations. They have been modelled on papers actually set by the various examining bodies, and the answers required will prove useful exercises in Composition. They are all most carefully graduated, and can be used either to test one particular period, or as Examination Papers of the subject generally.

The Rights and Duties of the English Citizen. [See under "Civics."]

A Student's History of Scotland. By DAVID W. RANNIE, M.A. With 4 Maps. Crown 8vo, 3s. 6d.

A history written throughout in simple language, and putting as clearly as possible the results of the most careful recent criticism from original sources.

Tales from Irish History. By A. BIRKHEAD, B.A. With a Map. Crown 8vo, 1s. 6d. [Stories from the Histories.]

Europe and the Empire**Six Ages of European History**

FROM A.D. 476 TO 1878

Edited by A. H. JOHNSON, M.A., Fellow of All Souls' College, Oxford.
With Maps Crown 8vo, 2s 6d each

The Dawn of Mediæval Europe, 476-918. By J. H. B. MASTERMAN
M.A., Professor of History in the University of Birmingham With
12 Maps Second Edition.

It is hardly possible to understand European history without some knowledge of the settlement of Europe after the Teutonic immigrations and the fall of the Empire in the West. This volume traces the successive rise of the Gothic and Frankish Kingdoms, leading to the establishment of the Holy Roman Empire under Charles the Great, and its break up under his descendants. The influence of the Eastern Empire, and the rise and conquests of the Mohammedan faith, are considered chiefly in their bearing on the development of Western Europe. Attention is directed especially to the central figures of the period Theodoric, S. Benedict, Justinian, Clovis, Charles the Great.

The Central Period of the Middle Age, 918-1273. By B. A. LEES,
Resident History Tutor, Somerville College, Oxford. With 10 Maps.
Second Edition.

Opening with the election of Henry the Fowler, and closing with the rise of the House of Hapsburg to power, it covers the period of the struggle for supremacy between Empire and Papacy and of the gradual building up of the nations of modern Europe on the ruins of Imperial Rome. It traces the development of feudalism and monasticism, of chivalry and the Crusades, of scholasticism and the Universities, and connects these great movements with the great men who inspired and led them.

The End of the Middle Age, 1273-1453. By E. C. LODGE, Vice-Principal and History Tutor, Lady Margaret Hall. Second Edition.

The period which it covers is one of great importance. It marks the decay of the political system of the Middle Ages, and the disappearance of the old unity in Western Europe, whilst in it can be traced the growth of new ideals to take the place of the old, and above all the rise of nations. It is essentially a time of transition, a period of effort and experiment rather than of finished work. Its great interest lies in the fact that all the details of the history are part of this gradual change from the Middle Ages to Modern days.

Europe in Renaissance and Reformation, 1453-1659. By M. A. HOLLINGS, M.A. Second Edition.

This book deals with the formation of the modern European state-system, the Renaissance and Reformation (both Protestant and Catholic), the consolidation and ascendancy of France in Europe, and the Wars of Religion, ending with the Thirty Years' War.

The Age of the Enlightened Despot, 1660-1789. By A. H. JOHNSON, M.A., Fellow of All Souls'. With 11 Maps. Second Edition.

The period covered by this volume opens with the triumph of the monarchy of Louis XIV and closes with the failure of the rule of Louis XVI. The aim of the volume is to bring clearly before the young reader the theory of monarchical rule represented by these kings, and to show when and why they succeeded or failed.

The Remaking of Modern Europe: From the Outbreak of the French Revolution to the Treaty of Berlin, 1789-1878 By J. A. R. MARRIOTT, M.A. With 10 Maps. Fourth Edition.

It contains a sketch of European history, presenting a vivid picture of the revolutionary period, of the rise and fall of Napoleon, and of the larger movements of European politics since Waterloo.

Stories from Modern History. By E. M. WILMOT-BUXTON, F.R. Hist. S. Crown 8vo, 1s. 6d. [*New Historical Series*]

An introduction to the story of modern history for pupils up to the age of twelve. In accordance with the suggestions made in the late circular of the Board of Education, it deals with "the chief events and characters from the history of the most important nations in their traditional form." It aims also at "giving some idea of the nature of the great nations and stages in civilisation, centred round certain individuals or events in their chronological succession" in such a way that young children shall be able at least to "place" the most notable characters of history.

Makers of Europe. Outlines of European History for the Middle Forms of Schools. By E. M. WILMOT-BUXTON, F.R. Hist. S. With 12 Maps. Tenth Edition. Crown 8vo, 3s. 6d.

A Textbook of European History for Middle Forms and Pupil Teachers.

Stories from French History. By TAYLOR DYSON, M.A. With a Map. Crown 8vo, 1s. 6d. [*Stories from the Histories.*]

A reader for children between eight and twelve.

The Story of the British Empire for Children. By F. M. ANDERSON. With many Illustrations. Revised Edition. Crown 8vo, 2s.

This book gives the story of the Empire in simple language for children. Part I. gives a rapid survey of the Colonies and Dependencies to show the unity of the whole under the Crown. Part II. describes in greater detail India, Canada, New Zealand, Australia, and Tasmania.

History and Geography Examination Papers. By C. H. SPENCE, M.A., Assistant Master at Chifton College. Third Edition. Crown 8vo, 2s. 6d. [*School Examination Series*]

The French Revolution. By J. E. SYMES, M.A., Principal of University College, Nottingham. With a Map. Second Edition. Crown 8vo, 2s. 6d.

A short general account of the French Revolution, bringing out the significance of the chief facts and their relation to problems of our own time.

LATIN

Grammars, Exercises, etc.

A School Latin Grammar. By H. G. FORD, M.A., Assistant Master at Bristol Grammar School. Crown 8vo, 2s. 6d. [*Junior School Books.*]

Both in the Accidence and Syntax what is essential for beginners is carefully separated, by a system of typing or paging, from what they may neglect. The book may thus be used by boys of all forms.

An Elementary Latin Exercise Book. By H. G. FORD, M.A., and L. V. CAUDWELL, M.A., Assistant Masters at Bristol Grammar School. Crown 8vo, 2s. 6d.

This book covers a two years' course divided into six parts, each part containing twelve explanations and twelve vocabularies of un'common' words (10 words), with twenty English-Latin sentences and fifteen Latin-Latin sentences to each explanation. Throughout only words and constructions found in Cæsar B. G. are used.

It is a companion book to Mr. Ford's "A School Latin Grammar."

Elementary Latin. Being a First Year's Course. By F. J. TERRY, B.A., Assistant Master at Preston House School, East Grinstead. Crown 8vo, Pupils' Book, 2s. ; Masters' Book, 3s 6d. net

A year's school course arranged for class teaching, with text written to allow the gradual introduction of all inflected forms. Nouns and verbs are built up according to their stem formation throughout, so that the learner gradually acquires the Accidence systematically. As a matter of practical experience, boys 10 or 11 years of age are able to construe Cæsar at the end of the course with but little help. The book contains Vocabularies, Grammar, and Exercises, and no other textbook is required by the pupils. The Masters' Book is a commentary on the Pupils' book, and explains the system of teaching. It directs attention consistently throughout to the *meaning* of words, and thus explains the Grammar.

A Junior Latin Prose. By H. N. ASMAN, M.A., B.D. Crown 8vo, 2s 6d [Junior School Books.

The "Junior Latin Prose" is written primarily, though not exclusively, with a view to the Junior Locals. It contains explanation of, and exercises on, the chief rules of Syntax, with special attention to points which cause difficulty to boys, and concludes with exercises in Continuous Prose

Exercises in Latin Accidence. By S. E. WINBOLT, M.A. Crown 8vo, 1s. 6d.

This book is adapted for Lower Forms, and is intended to accompany the Shorter Latin Primer.

Latin Passages for Unseen Translation. By A. M. COOK, M.A., Assistant Master at St. Paul's School, and E. C. MARCHANT, M.A., Tutor of Lincoln College, Oxford. Crown 8vo, 1s 6d.

Two hundred Latin passages, arranged in order of increasing difficulty. Has been carefully compiled to meet the wants of V. and VI. Form boys at the Public Schools, and is also well adapted for the use of honourmen at the Universities. Prose and verse alternate throughout.

Notes on Greek and Latin Syntax By G. BUCKLAND GREEN, M.A., Assistant Master at Edinburgh Academy. Third Edition. Crown 8vo, 3s. 6d.

For description, see under "Greek."

Latin Hexameter Verse. An Aid to Composition. By S. E. WINBOLT, M.A. Crown 8vo, 3s 6d. Key, 5s. net.

This book contains the fruit of several years' class teaching. It is offered as a help to Fifth and Sixth Forms at Public Schools, and Undergraduates at Universities.

The principle adopted is to aid in the composition of hexameter verse, by showing to some extent the development of this literary form, by inferring from the evolution what is the best workmanship, and by hinting how technique depends largely on thought.

By A. M. M. Stedman, M.A.

Initia Latina. Easy Lessons on Elementary Accidence. Revised by C. G. BOTTING, B.A. Twelfth Edition. Fcap. 8vo, 1s.

A very easy Latin course for quite young pupils, containing Grammar, Exercises, and Vocabularies.

First Latin Lessons. Revised by C. G. BOTTING, B.A. Twelfth Edition. Crown 8vo, 2s.

This book is much fuller than "Initia Latina, and while it is not less simple, it will carry a boy a good deal further in the study of elementary Latin. The Exercises are more numerous, some easy translation adapted from Cæsar has been added, and a few easy Examination Papers will afford a useful test of a boy's knowledge of his grammar. The book is intended to form a companion book to the "Shorter Latin Primer."

- A First Latin Reader.** With Notes adapted to the Shorter Latin Primer, and Vocabulary. Revised by C. G. BOTTING, B.A. Seventh Edition. 18mo, 1s. 6d.

A collection of easy passages without difficulties of construction or thought. The book commences with simple sentences and passes on to connected passages, including the history of Rome and the invasion of Britain, simplified from Eutropius and Caesar.

- Easy Latin Passages for Unseen Translation.** Thirteenth Edition. Fcap. 8vo, 1s. 6d.

A collection of short passages for beginners. The pieces are graduated in length and difficulty.

- Exempla Latina.** First Exercises in Latin Accidence. With Vocabulary. Fourth Edition. Crown 8vo, 1s.

This book is intended to be used midway between a book of elementary lessons and more difficult Exercises on Syntax. It contains simple and copious exercises on Accidence and Elementary Syntax.

- Easy Latin Exercises on the Syntax of the Shorter and Revised Latin Primers.** Revised by C. G. BOTTING, B.A. With Vocabulary. Thirteenth Edition. Crown 8vo, 1s. 6d. Key, 3s. net.

This book has been compiled to accompany Dr. Kennedy's "Shorter Latin Primer" and "Revised Latin Primer." Special attention has been paid to the rules of *oratio obliqua*, and the exercises are numerous.

- The Latin Compound Sentence.** Rules and Exercises. Second Edition. Crown 8vo, 1s. 6d.; with Vocabulary, 2s.

This book has been compiled to meet the requirements of boys who have worked through a book of easy exercises on Syntax, and who need methodical teaching on the Compound Sentence. In the main the arrangement of the Revised Latin Primer has been followed.

- Notanda Quædam.** Miscellaneous Latin Exercises on Common Rules and Idioms. Sixth Edition. Fcap. 8vo, 1s. 6d., with Vocabulary, 2s. Key, 2s. net.

This volume is designed to supply miscellaneous practice in those rules and idioms with which boys are supposed to be familiar. Each exercise consists of ten miscellaneous sentences, and the exercises are carefully graduated. The book may be used side by side with the manuals in regular use.

- Latin vocabularies for Repetition.** Arranged according to Subjects. Revised by C. G. BOTTING, B.A. Sixteenth Edition. Fcap. 8vo, 1s. 6d.

In this book an attempt has been made to remedy that scantiness of vocabulary which characterises most boys. The words are arranged according to subjects in vocabularies of twelve words each, and if the matter of this little book of eighty-nine pages is committed to memory, the pupil will have a good stock of words on every subject.

- A Vocabulary of Latin Idioms and Phrases.** Fifth Edition. 18mo, 1s.

Seven hundred useful Latin phrases arranged alphabetically, Latin-English.

- Latin Examination Papers in Miscellaneous Grammar and Idioms.** Fifteenth Edition. Cr. 8vo, 2s. 6d. Key (Seventh Edition), issued to Tutors and Private Students only, 6s. net.

The papers have been compiled to provide boys who have passed beyond the elementary stages of grammar and scholarship with practice in miscellaneous grammar and idioms.

Considerable space has been given to the doctrines of the moods (a real test of accurate scholarship), and to those short idioms and idiomatic sentences which illustrate the differences between the English and Latin languages.

Junior Latin Examination Papers. By C. G. BOTTING, B.A., Assistant Master at St. Paul's School. Seventh Edition. Fcap. 8vo, 1s. *Key*, 3s 6d. net. [*Junior Examination Series.*]

An easier book on the same lines as Stedman's "Latin Examination Papers." It is intended for use in the Lower Forms of Public Schools, and by candidates preparing for the Oxford and Cambridge Junior Local Examinations. The volume contains 720 carefully graduated original questions, divided into papers of ten questions each.

Examination Papers on Vergil. By W. G. COAST, B.A., Assistant Master at Fettes College. Crown 8vo, 2s.

Three papers are given to each *Georgic*, five to each *Æneid*, and one to each *Eclogue*, and in addition there are a number of general papers.

Examination Papers on Horace. By T. C. WEATHERHEAD, M.A. Crown 8vo, 2s.

In this volume the whole of Horace has been divided into short sections, and a paper has been set on each section, as well as (usually) two recapitulatory papers on each part, *e.g.* the first book of the *Odes*.

Texts

Simplified Latin Texts

Edited by H. N. ASMAN, M.A., B.D., Second Master of Owen's School, Islington.

This series is being prepared to meet the real need in schools of a more varied selection of authors for young pupils. The texts have been abridged with a view to economy of time, and also with a view to simplification. This has been done by omission, and not by alteration. Notes have been added sparingly, vocabularies have been given, and naturally long vowels marked throughout. A few questions on the subject-matter have been appended to furnish materials and suggestions for oral work and written composition. The texts are Fcap. 8vo, 1s. each. The first volumes are:—

The Catiline of Sallust. By A. J. BARNETT, M.A., Assistant Master, Emanuel School, Wandsworth, S.W.

Selections from Catullus. By H. N. ASMAN, M.A., B.D.

Stories from Ovid. By H. N. ASMAN, M.A., B.D.

The Siege of Veii and the Sack of Rome. Founded on "Livy v." By A. J. TATE, M.A., Owen's School, Islington.

Select Letters of Pliny. By A. J. TATE, M.A.

Cæsar.—EASY SELECTIONS FROM CÆSAR. The Helvetian War. With Notes and Vocabulary. By A. M. M. STEDMAN, M.A. Revised by C. G. BOTTING, B.A. Fourth Edition. 18mo, 1s.

Livy.—EASY SELECTIONS FROM LIVY. The Kings of Rome. With Notes and Vocabulary. By A. M. M. STEDMAN, M.A. Illustrated. Second Edition. 18mo, 1s. 6d.

Plautus.—THE CAPTIVI. Edited, with an Introduction, Textual Notes, and a Commentary, by W. M. LINDSAY, Fellow of Jesus College, Oxford. Demy 8vo, 10s. 6d. net.

The editor has recollated all the important MSS. The book contains a long Introduction and an important Appendix on the accentual elements in early Latin verse. The textual Notes are complete and the Commentary is full.

- Tacitus.**—**TACITI AGRICOLA.** With Introduction, Notes, Maps, etc. By R. F. DAVIS, M.A. Crown 8vo, 2s.
 ——— **TACITI GERMANIA.** By R. F. DAVIS, M.A. Crown 8vo, 2s.
 The text, edited with an Introduction, Notes, and Critical Appendix for Middle Forms

Translations

- Cicero.**—**DE ORATORE I.** Translated by E. N. P. MOOR, M.A., late Assistant Master at Clifton Second Edition. Crown 8vo, 3s. 6d.
 ——— **SELECT ORATIONS** (Pro Milone, Pro Murena, Philippic II., In Catilinam). Translated by H. E. D. BLAKISTON, M.A., Fellow and Tutor of Trinity College, Oxford. Crown 8vo, 5s.
 ——— **DE NATURA DEORUM.** Translated by F. BROOKS, M.A., late Scholar of Balliol College, Oxford. Crown 8vo, 3s. 6d.
 ——— **DE OFFICIIS.** Translated by G. B. GARDINER, M.A. Crown 8vo, 2s. 6d.
Horace.—**THE ODES AND EPODES.** Translated by A. D. GODLEY, M.A., Fellow of Magdalen College, Oxford. Crown 8vo, 2s.
Juvenal.—**THIRTEEN SATIRES OF JUVENAL.** Translated by S. G. OWEN, M.A. Crown 8vo, 2s. 6d.
Tacitus.—**AGRICOLA AND GERMANIA.** Translated by R. B. TOWNSEND, late Scholar of Trinity College, Cambridge. Crown 8vo, 2s. 6d.

MATHEMATICS

Algebra

- Easy Exercises in Algebra for Beginners.** Containing 3500 Original Problems. By W. S. BEARD. Second Edition. Crown 8vo. With Answers, 1s. 9d.; Without Answers, 1s. 6d.
 A preparatory course in Algebra for the Local Examinations. This book contains many distinctive features.
Test Cards in Euclid and Algebra. By D. S. CALDERWOOD, Headmaster of the Provincial Training College, Edinburgh. In three packets of 40, with Answers, 1s. each; or in three books, price 2d., 2d., and 3d.
Junior Algebra Examination Papers. By S. W. FINN, M.A., Headmaster of Sandbach School. With or Without Answers. Fcap. 8vo, 1s. [*Junior Examination Series.*]
 Seventy-two Papers of ten questions each. The problems, which are original, will be found suitable for candidates for the Local Examinations.

Arithmetic

- Easy Exercises in Arithmetic.** Containing 5000 Examples. By W. S. BEARD. Fourth Edition. Fcap. 8vo. With Answers, 1s. 3d.; Without Answers, 1s. [*Beginner's Books.*]
 A course of Arithmetic for Lower Forms in Secondary Schools and pupils preparing for Public Schools, Naval Cadetships, the Oxford and Cambridge Preliminary Local Examinations. The examples are very numerous, carefully graduated, and do not involve the use of big numbers.

Junior Arithmetic Examination Papers. By W. S. BEARD.
With or Without Answers Fifth Edition Fcap 8vo, 1s.

[*Junior Examination Series.*

Contains 900 Questions arranged in Papers of ten each Suitable for candidates for the Local Examinations, County Scholarships, etc.

The Metric System. By LEON DEIBOS. With numerous Examples.
Crown 8vo, 2s.

A clear and practical account of the subject, stating its advantages and disadvantages, the general principles of the system, linear measures, square and land measure, cubic measure and measures of capacity.

A South African Arithmetic. By H. HILL, B.A. Cr. 8vo, 3s. 6d.
Contains a number of examples on the South African Weights and Measures

Technical Arithmetic and Geometry. By C. T. MILLIS, M.I.M.E.,
Principal of the Borough Polytechnic Institute For use in Technical
Institutes, Modern Schools, and Workshops. Crown 8vo, 3s. 6d.

[*Textbooks of Science.*

A course in Arithmetic, Geometry, and Mensuration intended more especially for students in the engineering and building trades.

**Exercises and Examination Papers in Arithmetic, Logarithms,
and Mensuration.** By C. PENDLEBURY, M.A., Senior Mathe-
matical Master at St. Paul's School. Sixth Edition Crown 8vo, 2s. 6d.
Key, 5s. net. [*School Examination Series.*

A New Junior Arithmetic. By H. BOMPAS SMITH, M.A., Head-
master of King Edward VII. School, Lytham. Crown 8vo. With
Answers, 2s. 6d.; Without Answers, 2s.

In this book Arithmetic is taught as the habitual application of common sense to questions involving number, not as the acquisition of mechanical facilities in certain rules. It is the cheapest Arithmetic on reform lines issued.

A Short Commercial Arithmetic. By F. G. TAYLOR, M.A.
Fifth Edition. Crown 8vo, 1s. 6d. [*Commercial Series.*

A treatise for those with a fair knowledge of Arithmetic and Algebra. Special attention is given to quick methods of approximation. Contains an excellent chapter on the slide rule.

Book-keeping

Double Entry Book-Keeping. A Complete Treatise on its Theory
and Practice. By JAMES CUSACK, LL.D., Principal of the Business
Training College, Finsbury Square. Crown 8vo, 2s. 6d.

Covers the requirements for all the Elementary, Junior, and Intermediate Examinations held by the London Chamber of Commerce, the Royal Society of Arts, the National Union of Teachers, the Oxford and Cambridge Senior Locals, the College of Preceptors, and other similar Examinations.

The Principles of Book-Keeping by Double Entry. By J. E.
B. M'ALLEN, M.A., Headmaster of Lowestoft Secondary Day School.
Crown 8vo, 2s. [*Commercial Series.*

A clear and intelligible account of the principles for those who have no previous knowledge of the subject

Examination Papers in Book-Keeping. By J. T. MEDHURST.
Tenth Edition. Crown 8vo, 3s. Key, 2s. 6d. net.

[*School Examination Series.*

Geometry

Geometry on Modern Lines. By E. S. BOULTON, M.A., Lecturer on Mathematics, Merchant Venturers' Technical College, Bristol. Crown 8vo, 2s.

A textbook on the new method. Only necessary propositions have been retained, and the proofs are based on the simplest process of reasoning.

A. Preliminary Geometry. By NOEL S. LYDON, Assistant Master at Owen's School, Islington. With 159 Diagrams. Crown 8vo, 1s

The "Preliminary Geometry" is intended for the use of beginners. The treatment of the subject is mainly experimental and practical, and the ground covered is sufficient to enable the pupil to pass easily to the study of a formal course of theorems. Problems involving accurate measurement and arithmetical applications of geometrical principles are freely used; the book is copiously illustrated and a large number of useful exercises is provided.

A Junior Geometry. By NOEL S. LYDON. With 276 Diagrams. Seventh Edition. Crown 8vo, 2s. [*Junior School Books*]

The method of treatment is the outcome of the author's long practical experience as teacher of the subject at Owen's School, Islington. The grouping of kindred propositions, the demonstrations attached to the practical problems, the copious series of questions and exercises, and the methodical division of the subject into lessons of practical length, are features calculated to commend themselves to both master and pupil.

Geometrical Drawing

Geometrical Drawing for Art Students By SIDNEY A. SWITZER, Art Master and Honours Medallist in Geometry, Examiner to the Examination Board of the N.U.T. Fully Illustrated. Crown 8vo, 2s.

This up-to-date textbook is the result of twenty years' practical experience. It is designed to assist Art Students generally, and is suited to the requirements of candidates taking the Board of Education, Oxford and Cambridge Local, and College of Preceptors Examinations. The problems are well graduated; suggestive dimensions are inserted in their enunciation, and they are all illustrated. Each page is self-contained, so that there is no turning over in the study of any one problem. Each page has a corresponding set of exercises. These exercises are mostly original.

Mechanics

Examples in Elementary Mechanics, Practical, Graphical, and Theoretical. By W. J. DOBBS, M.A. With 52 Diagrams. Crown 8vo, 5s. (*See under Physics, p. 39*)

Trigonometry

A New Trigonometry for Beginners. By R. F. D'ARCY, M.A., Lecturer on Mathematics at Gonville and Caius College, Cambridge. With numerous Diagrams. Crown 8vo, 2s. 6d.

Among the special features of this book are —The introduction of experiments in practical geometry to lead up to many of the topics considered, the use throughout the book of four-figure tables, the regulation of the special consideration of the trigonometrical ratios of angles of 30, 45, 60, 120, 135, and 150 degrees to a few worked-out examples.

Trigonometry Examination Papers. By the Rev. G. H. WARD, M.A. Fourth Edition. Crown 8vo, 2s. 6d. Key, 5s. net [*School Examination Series*].

SCIENCE

Biology

Outlines of Biology. By P. CHALMERS MITCHELL, D.Sc. (Oxon.), M.A. (Aberdon. et Oxon.), F.R.S., F.L.S., Secretary to the Zoological Society, London, late Lecturer in Biology and Comparative Anatomy, London Hospital Medical College, University of London. Revised by GEO. P. MUDGE, A.R.C.Sc. (Lond.), F.Z.S., Lecturer on Biology and Comparative Anatomy, London Hospital Medical College, University of London, and the London School of Medicine for Women, University of London. With Diagrams and many new half-tone Illustrations. Crown 8vo, 6s. net.

The book is primarily written to meet the needs of students preparing for the examinations of the Conjoint Board of the Royal Colleges of Physicians and Surgeons of England. But it covers to a great extent the syllabuses of other examining bodies, and students reading for the L.L.A., for Durham University, for the Conjoint Colleges of Scotland, and for the first Medical examination of London University will find a great deal of the required ground covered by its contents. The book has been brought up to date, and the additional types recently introduced into the syllabus of the Conjoint Colleges are now included. New Chapters on Histology, on the structure of stem, root, and leaf, and many fresh illustrations in half-tone have been added.

Elementary Zoology. By C. A. EALAND, M.A., F.L.S., late Principal of the County Laboratories, Chelmsford. With numerous Diagrams and Illustrations. Crown 8vo, 2s. 6d.

Primarily designed to meet the needs of students reading for the Cambridge Junior and Senior Local Examinations, the London Matriculation Examination and Stage I. Zoology Examination of the Board of Education, this book also serves as a general introduction to Zoology.

With structural adaptation as the keynote, members of all the more important classes of the animal kingdom are reviewed, and certain types are selected for detailed consideration, in the laboratory and in the field. Suggestions for practical work and for obtaining and preserving specimens are given in each chapter.

Agricultural Zoology. By Dr. J. RITZEMA BOS. Translated by J. R. AINSWORTH DAVIS, M.A. With 155 Illustrations. Second Edition. Crown 8vo, 3s. 6d.

A condensed review of the entire animal kingdom, treating in some detail the animals harmful or helpful to agriculture. It is a manual suitable not only for students, but also for the practical farmer and general reader.

Preliminary Physiology. By WILLIAM NARRAMORE, F.L.S., M.R. San Inst., Lecturer in Physiology, Hygiene, Biology, and Botany, Municipal Technical School, Liverpool. Crown 8vo, 3s. 6d.

[*Textbooks of Science.*

This book aims at giving systematic instruction in relation to the essential functions of the human body. The many original drawings, sketches, and photomicrographs have been prepared directly from specimens. The book meets the requirements of the Board of Education, the Oxford and Cambridge Locals (Senior), the College of Preceptors, Candidates for Matriculation, and the several examinations in Physiology held for students in Hygiene, Physical Culture, Cookery, for nurses in Probation, and students preparing for examinations in Law, Insurance, and Accountancy, where Physiology is now demanded.

Dairy Bacteriology. A Short Manual for Students in Dairy Schools Cheese-makers, and Farmers. By DR. ED. VON FREUDENREICH. Translated by J. R. AINSWORTH DAVIS, M.A. Second Edition, Revised. Crown 8vo, 2s. 6d.

A brief treatise on bacteriology as applied to dairying. For students who mean to become cheese-makers or dairymen, it is only necessary to get a general idea of bacteriology and to become familiarised with the results so far attained by bacteriological research as regards dairying, and the practical application of the same. The author has therefore introduced only so much of the general part of bacteriology as is absolutely necessary for the comprehension of the bacteria of milk, and has made the whole as brief and elementary as possible.

Insect Life. By F. V. THEOBALD, M.A. Illustrated. Second Edition, Revised. Crown 8vo, 2s. 6d.

A short account of the more important characteristics of insects, dealing with their economic value at the same time.

Botany

An Elementary Textbook of Agricultural Botany. By M. C. POTTER, M.A., F.L.S., Professor of Botany, Armstrong College, Newcastle-on-Tyne. Illustrated. Third Edition. Crown 8vo, 4s. 6d.

A textbook of Botany intended more especially for agricultural students. Considerable space is devoted to vegetable physiology.

Elementary Lessons on Plant Life. By D. G. SCOTT, M.Sc., Assistant Lecturer and Demonstrator in Botany in the University of Liverpool. With many Diagrams and Illustrations. Crown 8vo, 2s. 6d.

Designed for use in the Lower Forms of Secondary Schools, and for private study in the Upper Standards of Elementary Schools, the book will be found useful for the Oxford and Cambridge Junior Locals, the National Froebel Union Certificate, and other Examinations. Suggestions for practical work head each chapter, and special attention has been paid to the difficulties experienced in nature-study in town schools.

Plant Life. Studies in Garden and School. By HORACE F. JONES, Science Master, Uxbridge County School. With 320 Illustrations. Crown 8vo, 3s. 6d. [*Textbooks of Science.*]

A handbook for teachers of botany. A large number of experiments are included, and full nature-study notes on all plants usually studied in the class-rooms are given. It is recommended by the Board of Education in "Suggestions on Rural Education," page 42.

"This volume furnishes just the right kind of course, both in garden work and in class-room experiments, which is likely to stimulate a permanent interest in the mind of the pupil and lead him to continue his investigations after he has left school. We have great pleasure in recommending the book."—*Schoolmaster*

Chemistry

General

A Concise History of Chemistry. By T. P. HILDITCH, D.Sc. (London), A.I.C., F.C.S. Crown 8vo, 2s. 6d.

Primarily intended as a help to chemical students, more particularly those studying for University or advanced technical examinations, this book will also, it is hoped, prove serviceable to general readers who may wish to have a concise outline of the development of chemistry. Commencing with a general survey of the chemistry of the Ancients and the

Middle Ages, the author shows how the modern science evolved from these, and then proceeds to the history of the various branches—elements, minerals, organic, technical and physical chemistry, etc. A glossary of the most notable names in chemistry is added, and, as far as possible, the sequences of facts or theories have been summarised in tables which, while assisting the memory of the student preparing for examinations, may be omitted by the casual reader.

Elementary Chemical Theory. By J. M. WADMORE, M.A., Senior Science Master at Aldenham School. With Diagrams. Crown 8vo, 3s. 6d.

This book is intended principally for the middle and senior students of Chemistry at Public and Secondary Schools. It is almost entirely occupied with the chief aspects of the atomic and molecular theories.

"We know of no book on elementary chemical theory which we could more strongly recommend."—*Journal of Education*.

"If we were asked to recommend a guide to the elements of chemical theory suitable for students at an early period of their work, we could suggest nothing better than this book."—*Knowledge*.

Higher Mathematics for Chemical Students. By J. R. PARTINGTON, B.Sc., Graduate Scholar and Beyer Fellow of the University of Manchester. With Forty-four Diagrams. Crown 8vo, 5s.

In this book the principles of the Infinitesimal Calculus and Differential Equations are developed from the most elementary foundations, and with special reference to chemistry. Since the application of mathematics is now necessary, not only in physical chemistry, but also in organic and inorganic chemistry and metallurgy, the book is addressed to a wide circle of readers.

Inorganic

Elementary Experimental Chemistry. By A. E. DUNSTAN, D.Sc. (Lond.), Head of the Chemical Department, East Ham Technical College. With 109 Diagrams. Third Edition. Crown 8vo, 2s.

[*Junior School Books.*]

The arrangement for this book is modelled on that of "Elementary Experimental Science." The subject is treated experimentally, and covers the necessary ground for Oxford and Cambridge Junior Locals, College of Preceptors (Second Class), and Board of Education (First Stage) Examinations. The author believes that the method adopted is truly educational. The subject is developed in a logical sequence, and wherever possible, historically.

An Elementary Text Book of Inorganic Chemistry. By R. LLOYD WHITELEY, F.I.C., Principal of the Municipal Science School, West Bromwich. Second Edition. Crown 8vo, 2s. 6d.

This book has been written primarily for the use of those who are commencing the Study of Theoretical Inorganic Chemistry on the lines laid down for Stage I. of that subject in the Syllabus issued by the Board of Education. The subject-matter of that Syllabus has consequently been fully discussed.

A Junior Chemistry. By E. A. TYLER, B.A., F.C.S., Head of the Chemical Department, Swansea Technical College. With 78 Illustrations. Sixth Edition. Crown 8vo, 2s. 6d.

[*Junior School Books.*]

The first twenty-three pages are devoted to the necessary physical laws and processes. The purification and properties of water are used to illustrate these processes. The student is thus led by a *continuous chain of reasoning* through the preparation of pure water to the chemistry of water, and hence to a knowledge of the fundamental principles of chemistry. The middle portion of the book treats of these principles, and then follows the study of certain typical elements and compounds. Problems and Examination Papers are appended.

- A Textbook of Inorganic Chemistry.** By G. SENTER, D.Sc., Ph.D., Lecturer at St. Mary's Hospital Medical School, Author of "Outlines of Physical Chemistry." With many Diagrams. Crown 8vo 6s. 6d. [*Textbooks of Science*]

The book is designed as a general introduction to the study of Inorganic Chemistry. It is written throughout from the modern standpoint, so that the student who has worked through it should be in a position to profit from the reading of original papers, and to proceed without difficulty to the study of advanced works on the different branches of the subject. The theoretical part of the subject is distributed throughout the book, and as far as possible the facts on which the theories and hypothesis are based are given before the statement of the theories themselves. The great importance to the student of learning to draw a clear distinction between facts and theories is kept in mind throughout. The book is suitable for the Intermediate and Pass B.Sc. University Examinations and other examinations of similar scope.

- The Complete School Chemistry** By F. M. OLDHAM, B.A., Senior Chemistry Master at Dulwich College. With 125 Illustrations. Fifth Edition. Crown 8vo, 4s. 6d.

A complete course in practical and theoretical chemistry up to the standard of the London Matriculation and Army Entrance Examination. It is so arranged that a boy with no knowledge of chemistry may begin the book and use it throughout his progress up the school. Short courses on volumetric analysis and on the common metals are included.

- Practical Chemistry.** By W. FRENCH, M.A., Director of Education for Lancaster. Part I. Fifth Ed. Cr. 8vo, 1s. 6d. [*Textbooks of Science*]

A course on purely inductive lines dealing with evaporations and distillations, filtration, solubility, air, water, chalk, soda, common salt, sugar, compound and simple matter, etc.

- Practical Chemistry.** By W. FRENCH, M.A., and T. H. BOARDMAN, M.A., Science Master at Christ's Hospital. Part II. Crown 8vo, 1s. 6d. [*Textbooks of Science*]

A continuation of the above dealing with gases, laws of chemical combination, equivalents, atomic theory, molecular weights, symbols, sulphur, nitrogen, carbon, and their compounds, salts, acids, bases, valency.

- A Practical Chemistry Notebook for Matriculation and Army Candidates.** Easy Experiments on the Commoner Substances. By S. E. BROWN, M.A., B.Sc., Senior Science Master at Uppingham. Crown 4to, 1s. 6d. net.

The method is based on practical experience, and aims at maintaining interest by ensuring success and accuracy in experimenting. The chief objects in view are — (1) a logical sequence in work and accurate experimenting by demonstration of practical use of apparatus, (2) to allow the teacher more time for individual attention, and to keep the class together at work on the same experiment. This is done by providing a series of practical problems to keep the more rapid workers employed, as well as for use in revision. Working for two hours (practical) per week, the course should be completed in about three terms. There are spaces provided for notes to be taken by the pupil.

- A Senior Experimental Chemistry.** By A. E. DUNSTAN, D.Sc. (Lond.). With Diagrams and Illustrations. Crown 8vo, 3s. 6d.

This volume is intended as a supplement to the author's well-known text-books, "Elementary Experimental Science" and "Elementary Experimental Chemistry." It will contain sufficient matter to provide for the remainder of a boy's school career, and will build up a sound development of modern chemical theory on the experimental foundation of his first two years' work.

The treatment will be based on the Periodic Classification, preceded by a discussion of the Atomic and Molecular Theories with the rudiments of Physical Chemistry, Thermochemistry, and Crystallography. The necessary Practical Chemistry will be incorporated and a section on Qualitative Analysis with the elements of Volumetric Analysis will complete the course. It is believed that this book will be of use to Second Year Students in Technical Institutes.

- A Practical Chemistry for Technical Institutes.** By A. E. DUNSTAN, D.Sc.; and F. B. T. THOLE, B.Sc., Lecturer in Organic Chemistry, East Ham Technical College. Crown 8vo, 3s. 6d.

[*Textbooks of Science.*

This Course of Practical Chemistry meets the requirements of the Upper Forms of Secondary Schools, where a good elementary foundation has been laid in the rudiments of manipulation. The book will be found useful also for classes in Technical Institutes and will cover the following ground —

Qualitative Analysis of simple substances and of mixtures, Volumetric Analysis, Simple Gravimetric Analysis, Preparation of Pure Compounds, More difficult Quantitative Analysis, Qualitative Organic Analysis, Ultimate Organic Analysis, General Organic Determinations, Determination of Physical Constants.

- An Introduction to Quantitative Analysis.** By S. J. M. AULD, D.Sc. (Lond.), Ph.D. (Würzburg), F.I.C., F.C.S., Head of the Chemical Department, South-Eastern Agricultural College, Wye. With many Diagrams. Crown 8vo, 5s.

This book is a carefully selected study of the elements of quantitative analysis, providing a thorough introductory course, whereby the student is prepared for his more specialised analytical work, details and considerations of which are best obtained from the standard treatises and monographs.

Duplication is largely avoided by giving alternative methods for subsequent estimations of the same type. Special features are a theoretical chapter on indicators, and a description of exact laboratory methods for the determination of equivalents, etc.

The textbook contains all the inorganic quantitative work required for the Board of Education examinations and the Inter and Final B.Sc. Courses.

It will be noted that a complete and consistent school course in Experimental Chemistry, extending over five years, can be covered from Messrs. Methuen's list, as follows. —

- First Year Elementary Experimental Science, see p. 38, Chemistry Section, by A. E. Dunstan.
 Second Year Elementary Experimental Chemistry, by A. E. Dunstan.
 Third and Fourth Years . . . A Senior Experimental Chemistry, by A. E. Dunstan.
 Fifth Year A Practical Chemistry for Technical Institutes, by A. E. Dunstan and F. B. T. Thole, and
 An Organic Chemistry for Schools and Institutes, by A. E. Dunstan.

Organic

- An Organic Chemistry for Schools and Technical Institutes.** By A. E. DUNSTAN, D.Sc. With 2 Plates and many Diagrams. Crown 8vo, 2s. 6d.

[*Textbooks of Science.*

This book, which has not been prepared to meet the requirements of any particular examining body, is intended for the use of the higher forms of schools taking the Special Science Course, and as a first-year textbook in Technical Institutes. The author does not follow the conventional separation of Organic Chemistry into the two *ipso facto* inseparable domains of Aliphatic and Aromatic compounds, but endeavours to give a bird's-eye view of the more prominent features in the Science.

Second Year Organic Chemistry for Schools and Technical Institutes. By F. B. T. THOLE, B.Sc., Lecturer in Organic Chemistry, East Ham Technical College. With Plates and Diagrams. Crown 8vo, 2s. 6d. [*Textbooks of Science.*]

This book forms Vol. II. of a series designed to meet the requirements of students in technical institutes. It deals with that portion of the subject necessary for the second year student, and covers the syllabus for Stage II. of the examination held by the Board of Education. It is hoped, however, that it will be found useful for those students taking the first year of their B.Sc. Course.

The book contains an account of the properties of the carbo-cyclic compounds, their general synthesis, and their utilisation for industrial and scientific purposes. Questions of constitution and the chief reactions associated with this class of compound are fully discussed and carefully explained.

Third Year Organic Chemistry for Schools and Technical Institutes by T. P. HILDITCH, D.Sc. (Lond.), F.I.C. Author of "A Concise History of Chemistry." With Plates and Diagrams. Crown 8vo, 3s. [*Textbooks of Science.*]

This book completes the course of organic chemistry whose earlier stages have been dealt with by Dr. Dunstan (Part I) and Mr. Thole (Part II.). It is occupied for the most part with the systematic study of the different groups of heterocyclic compounds, especially those of practical or commercial value. The alkaloids, purines, and other cyclic urea derivatives, and numerous important dyestuffs fall within the scope of these chapters. The remainder of the book deals with the polypeptides, the terpenes, and some general problems such as the characteristics of residual affinity. The work is suited to the needs of honours students in this subject, either for the B.Sc. or the Board of Education examinations.

The Identification of Organic Compounds. By F. B. T. THOLE, B.Sc. With an Introduction by A. E. DUNSTAN, D.Sc. Crown 8vo, 1s. 6d.

This book is reprinted, with additions, from the authors' "Practical Chemistry for Technical Institutes" in such a form as to be self-contained. It deals with Organic Qualitative Analysis, both of simple compounds and mixtures. A large range of organic derivatives is dealt with, and the author confidently believes that the scheme will carry a student through the Organic Section of his Honours Degree Course.

A complete list of melting and boiling points is given, the substances being classified into their groups. Throughout conciseness and compactness have been aimed at, so that the student will have the information needed always at hand in an accessible form.

Modern Research in Organic Chemistry By F. G. POPE, B.Sc. (Lond.), F.C.S., Lecturer in Organic Chemistry, East London College. Crown 8vo, 7s. 6d. [*Textbooks of Science.*]

This volume is an attempt to bring, in a concise form, the development of some of the more important branches of organic chemistry before the chemical student. The results of the most recent research work are embodied in the text, and a bibliography is given at the end of each chapter, so that the student may be able to make use of current literature.

Physical

A First Year Physical Chemistry By T. P. HILDITCH, D.Sc.
(Lond.), F.I.C. Crown 8vo, 2s [Textbooks of Science.]

An attempt to render this branch of chemistry more easy to those commencing its study. The more elementary outlines of the subject are treated as far as possible, from the standpoint of practical use in solving chemical problems, accordingly, the first part of the book is devoted to characteristic properties such as density or refractivity. Later chapters include introductions to the physico-chemical theories of gases and of solutions and the more important applications of these theories to pure chemistry. The book should prove useful to Inter B.Sc. and Final (Pass) B.Sc. candidates, as well as those taking Board of Education examinations.

Outlines of Physical Chemistry By GEORGE SENTER, B.Sc.,
Ph.D., Lecturer in Chemistry at St. Mary's Hospital Medical School.
With many Diagrams. Second Edition, Revised and Enlarged. 5s
[Textbooks of Science.]

This book is designed to serve as a general introduction to Physical Chemistry, and is specially adapted to the needs of electrical engineers, to whom an acquaintance with the general principles of this subject is becoming of increasing importance. Particular attention is devoted to the theory of solutions and to the modern developments of electro-chemistry. Only an elementary knowledge of mathematics is assumed.

Physico-Chemical Calculations. By JOSEPH KNOX, D.Sc., Lecturer
on Inorganic Chemistry, Aberdeen University. Crown 8vo, 2s 6d.
[Textbooks of Science.]

This book is intended for students of physical chemistry, as a supplement to the theoretical matter of lectures and textbooks. Here the theory is applied to the solution of practical problems. The book contains eleven chapters, dealing with the main subdivisions of physical chemistry. Each chapter consists of a short introduction dealing with the theory required for the solution of the problems, a series of typical problems with complete solutions, and a list of problems for solution with answers. Practically all the problems have been taken from the original literature of the subject, and by a careful study of the solved problems the student should learn much. The large collection of problems for solution should prove useful to teachers.

General Science

Elementary Experimental Science **Physics** by W. T. CLOUGH,
A.R.C.S., Head of the Physics and Electrical Engineering Department,
East Ham Technical College. **Chemistry** by A. E. DUNSTAN, D.Sc.,
With 2 Plates and 154 Illustrations. Ninth Edition. Crown 8vo, 2s 6d.
[Junior School Books.]

This book is primarily intended for the use of candidates taking Experimental Science in the Junior Local Examinations. It will also be found of use to those competing for County Council Intermediate Scholarships, and as a general textbook in Science Schools. The great majority of the Diagrams have been specially drawn.

Elementary Science for Pupil Teachers. **Physics Section** by
W. T. CLOUGH; **Chemistry Section** by A. E. DUNSTAN. With
many Illustrations. Crown 8vo, 2s. [Textbooks of Science.]

A textbook to meet the new requirements of the Elementary Science section of the Preliminary Examination for the Certificate on the same lines as above.

General Elementary Science. By J. T. DUNN, D Sc., and V. A. MUNDELLA, Principal of Sunderland Technical College With 114 Illustrations. Second Edition Crown 8vo, 3s 6d

An intermediate course in Physics and Chemistry for London Matriculation. It is the textbook adopted by the Admiralty for Elementary Science at Greenwich College

The World of Science. By R. ELLIOTT STEEL, M.A., F C S., Science Master at Sherborne School With 147 Illustrations. Second Edition Crown 8vo, 2s 6d.

An elementary account of Chemistry, Heat, Light, Sound, Magnetism, Electricity, Botany, Zoology, Physiology, Astronomy, and Geology written in an interesting manner for children

Geology

The Scientific Study of Scenery. By J. E. MARR, F.R.S., Fellow of St. John's College, Cambridge. Third Edition Illustrated. Crown 8vo, 6s.

An elementary treatise on geomorphology for geographers. As far as possible technical terms have been avoided to render it intelligible to the general reader who wishes to obtain some notion of the laws which have controlled the production of the earth's principal scenic features

Agricultural Geology. By J. E. MARR, F.R.S. Illustrated. Crown 8vo, 6s.

A textbook of geology for agricultural students, more especially such as are preparing for the International Diploma in agriculture.

Physics

First Year Physics. By C. E. JACKSON. With 51 Illustrations Crown 8vo, 1s. 6d [Textbooks of Science]

This book deals with such subjects as may reasonably be included in a first year course of Physics for Secondary Schools,—the processes of measurement and the elementary principles of Hydrostatics and Mechanics

Examples in Physics. By C. E. JACKSON, M.A., Senior Physics Master at Bradford Grammar School Second Edition. Crown 8vo, 2s. 6d. [Textbooks of Science.]

A collection of over one thousand original problems on Mensuration, Hydrostatics, Mechanics, Heat, Light, Magnetism, Frictional Electricity, Current Electricity and Sound, covering the average Physics course in Secondary Schools.

Elementary Practical Physics. By HENRY STROUD, D Sc., M.A., Professor of Physics, Armstrong College, Newcastle-on Tyne. With Diagrams. Third Edition. Crown 8vo, 4s 6d.

An introduction to practical work in a Physical Laboratory and the standard works on the subject.

Elementary Experimental Electricity and Magnetism. By W. T. CLOUGH, A.R.C.Sc., F.C.S., Fellow of the Physical Society, Head of the Department of Physics and Electrical Engineering, East Ham Technical College. With 235 Illustrations and 193 Experiments. Crown 8vo, 2s 6d. [Textbooks of Science.]

This book is intended for the use of students taking Electricity and Magnetism in the Junior Local Examinations, and for those taking Stage I. in the Board of Education Examinations. It is hoped that it will be found useful as an introductory course to the subject of Electrical Engineering.

The Principles of Magnetism and Electricity. By P. L. GRAY, B.Sc. An Elementary Textbook. With 181 Diagrams. Crown 8vo, 3s 6d

Although not written to any special syllabus, the book will approximately cover the requirements of the Advanced Stage of the Board of Education Examination, and London B Sc Pass Examination. It is well illustrated with sketches such as a student may, with a little practice, draw for himself from the actual apparatus

Examples in Elementary Mechanics, Practical, Graphical, and Theoretical. By W. J. DOBBS, M.A. With 52 Diagrams. Crown 8vo, 5s. [*Textbooks of Science.*]

This book is intended for use at Schools and Technical Institutes, for Army and Navy Candidates and Students of Engineering. It consists of some 1400 examples in Elementary Statics and Kinetics exhibiting the latest development in the methods of teaching these subjects. But it is something more than a mere collection of examples, being designed for use without an accompanying textbook. The preparation and use of simple inexpensive apparatus is described, and the numerous practical examples requiring the use of such apparatus have been found to give satisfactory results.

Weighing and Measuring. A Short Course of Practical Exercises in Elementary Mathematics and Physics, by W. J. DOBBS, M.A., Assistant Master at Oundle School. With 47 Diagrams. Crown 8vo, 2s.

Contents. I. Measurement of Length, II. Weighing, III. Measurement of Area; IV. Measurement of Volume, V. Density and Specific Gravity.

This volume covers that common ground between Elementary Mathematics and Physics which is necessary to give reality to the former, and which is indispensable before taking up any serious study of the latter. By common consent, a course of Weighing and Measuring is now an essential part of school training in Elementary Mathematics. Care has been taken to keep the scope of the book well within the reach of the great majority of senior school children of both sexes.

Practical Mechanics. By SIDNEY H. WELLS, Wh.Sc., A.M Inst.C.E., late Principal of the Battersea Polytechnic, London. An Elementary Manual for the use of Students in Science and Technical Schools and Classes. With 75 Illustrations and Diagrams. Fifth Edition. Crown 8vo, 3s. 6d. [*Textbooks of Science.*]

A laboratory handbook containing all the mechanics part of the elementary science syllabus of the Headmasters' Association and the London Matriculation.

Intermediate Physics. By W. H. WHITE, M.A., B.Sc., A.R.C.Sc., Lecturer at the East London College and St. Mary's Hospital Medical School, Examiner in the University of London, etc. With many Diagrams. Crown 8vo, 7s. 6d. [*Textbooks of Science.*]

The book traces the establishment of the Principles of Physics and draws from modern everyday life abundant instances of their application, instead of giving detailed descriptions of time-honoured experiments. It amply covers the ground of the "Intermediate" examinations of London and other British Universities. Paragraphs are marked to facilitate its use by medical students, and some prominence is given to physiological matters.

Physics Examination Papers. By R. ELLIOTT STEEL, M.A., Science Master at Sherborne School. Crown 8vo, 2s. 6d.

[*School Examination Series.*]

Papers on Sound, Light, Heat, Magnetism, and Electricity. Both book-work and problems are included.

TECHNOLOGY

(See also under "Domestic Science")

A Woodwork Class-Book Beginner's Course By H. HEY, Inspector of Day Manual and of Technological Classes, Surrey Education Committee, and G. H. ROSE, Headmaster, Coulsdon Council School, City and Guilds Woodwork Teacher. With full Diagrams and Photographs. 4to, 2s.

This class-book is the first of a series of three, in which the work is arranged on a threefold plan of Correlated Lessons in Drawing, Tools and Materials, and School Workshop Practice. The schemes have been approved by the Board of Education.

Manual Training Drawing (Woodwork). Its Principles and Application, with Solutions to Examination Questions, 1892-1905, Orthographic, Isometric, and Oblique Projection. By F. STURCH, Staff Instructor to the Surrey County Council. With 50 Plates and 140 Figures. Fcap., 5s. net.

A guide to the Examinations in Manual Training Woodwork of the City and Guilds of London Institute, the Board of Education for Educational Handwork, and the Examinations of the N.U.T., and for use in Secondary Schools and Training Colleges. It deals with the requirements in Geometrical and Mechanical Drawing of the Educational Department, University of London, London Chamber of Commerce, etc.

Carpentry and Joinery. By F. C. WEBBER, Chief Lecturer to the Building Trades Department of the Merchant Venturers' Technical College at Bristol. Sixth Edition. Crown 8vo, 3s. 6d.
[*Textbooks of Technology.*]

An elementary textbook suitable for the Preliminary Grade of the City and Guilds of London Institute and as a book of reference for the apprentice.

Builders' Quantities. By H. C. GRUBB, Lecturer at Beckenham Technical Institute. Crown 8vo, 4s. 6d. [Textbooks of Technology]

This treatise has been compiled to assist students who are preparing for the examination in Builders' Quantities, held by the City and Guilds of London Institute, while those studying for other examinations, such as Honours Building Construction, held by the Board of Education, etc., will find it covers that portion of the syllabus relating to Quantities.

Engineering Workshop Practice. By CHARLES C. ALLEN, Head of the Department of Engineering, Technical Institute, Auckland. With 152 Illustrations. Crown 8vo, 3s. 6d. [Textbooks of Technology.]

This deals with the manufacturing operations employed in modern workshops, and is intended chief for students who have opportunities of both examining and using the machines and tools required.

Répoussé Metal Work. By A. C. HORTH. Crown 8vo, 2s. 6d.
[Textbooks of Technology.]

This book provides students with a graded scheme of Sheet Metal Work for Schools, containing all the information necessary to those wishing to become expert.

Electric Light and Power. By E. E. BROOKS, B.Sc. (Lond.), Head of the Department of Physics and Electrical Engineering, Leicester Municipal Technical School, and W. H. N. JAMES, A.R.C.S., A.M.I.E.E., Lecturer in Electrical Engineering, Municipal School of Technology, Manchester. With 17 Plates and 230 Illustrations. Second Edition. Crown 8vo, 4s. 6d. [*Textbooks of Technology.*]

This work is an introduction to the study of Electrical Engineering, no previous knowledge being assumed, and very little mathematics being required. It is intended mainly for students employed in electrical industries.

An Introduction to the Study of Textile Design. By ALDRED F. BARKER, Head of the Textile Department, Bradford Technical College. Demy 8vo, 7s. 6d. [*Textbooks of Technology.*]

This work includes within its pages the information which the student of Textile Design should seek to thoroughly master during the first two years he attends the Textile School.

A Textbook dealing with Ornamental Design for Woven Fabrics. By C. STEPHENSON, of the Bradford Technical College, and F. SUDDARDS, of the Yorkshire College, Leeds. With 66 Full-page Plates and numerous Diagrams in the Text. Third Edition. Demy 8vo, 7s. 6d.

The subject-matter is arranged as far as possible in progressive order, and always with due regard to the practical application of ornament to the weaving process. Several chapters are devoted to the various methods of building up all-over repeating patterns.

MESSRS. METHUEN'S SERIES

Particulars of the following Books will be found in the First Section of this Catalogue, under the Subjects. Further Series will be found under the Subjects, namely, Simplified French Texts, p. 12, Advanced French Texts, p. 13, New Geographical Series, p. 14; Simplified German Texts, p. 16, School County Histories, p. 21; Six Ages of European History, p. 24.

The Beginner's Books

EDITED BY W. WILLIAMSON, B.A., F.R.S.L.

A series of elementary class books for beginners of seven to twelve years, or thereabouts. They are adapted to the needs of preparatory schools, and are suitable for the use of candidates preparing for the Oxford and Cambridge Preliminary Local and the College of Preceptors Examinations. The series will be especially useful to lead up to Methuen's Junior School Books. The author of each book has had considerable experience in teaching the subject, while special attention has been paid to the arrangement of the type and matter, which is as clear and concise as possible. The books are beautifully printed and strongly bound.

Easy French Rhymes. H. BLOET. 1s.
Easy Stories from English History. E. M. WILMOT-BUXTON. 1s.
Stories from Roman History. E. M. WILMOT-BUXTON. 1s. 6d.
Stories from the Old Testament. E. M. WILMOT-BUXTON. 1s. 6d.
Stories from the New Testament. E. M. WILMOT-BUXTON. 1s. 6d.

A First Course in English. W. S. BEARD. 1s. 6d.
A First History of Greece. E. E. FIRTH. 1s. 6d.
Easy Exercises in Arithmetic. W. S. BEARD. Without Answers, 1s., With Answers, 1s. 3d.
Easy Dictation and Spelling. W. WILLIAMSON. 1s.
An Easy Poetry Book. W. WILLIAMSON. 1s.

Classical Translations

EDITED BY H. F. FOX, M.A., FELLOW AND TUTOR OF BRASENOSE COLLEGE, OXFORD.
Crown 8vo

A series of Translations from the Greek and Latin Classics, distinguished by literary excellence as well as by scholarly accuracy

Æschylus—AGAMEMNON, CHOROPHOROE, EUMENIDES. Translated by L. CAMPBELL. 5s

Cicero—DE ORATORE. I. Translated by E. N. P. MOOR. 3s 6d

Cicero—SELECT ORATIONS. Translated by H. E. D. BLAKISTON. 5s

Cicero—DE NATURA DEORUM. Translated by F. BROOKS. 3s 6d

Cicero—DE OFFICIIS. Translated by G. B. GARDINER. 2s 6d

Horace—THE ODES AND EPODES

Translated by A. D. GODLEY. 2s

Lucian—SIX DIALOGUES. Translated by S. T. ILWIN. 3s 6d

Sophocles—AJAX AND ELECTRA. Translated by E. D. MORSHEAD. 2s 6d

Tacitus—AGRICOLA and GERMANIA. Translated by R. B. TOWNSHEND. 2s 6d

Thirteen Satires of Juvenal. Translated by S. G. OWEN. 2s 6d

Commercial Series

EDITED BY H. DE B. GIBBINS, LITT D., M.A.
Crown 8vo

A series intended to assist students and young men preparing for a commercial career, by supplying useful handbooks of a clear and practical character, dealing with those subjects which are absolutely essential in the business life

The Principles of Book-keeping by Double Entry. J. E. B. M'ALLEN. 2s

A French Commercial Reader. S. E. BALLY. 2s

French Commercial Correspondence. S. E. BALLY. 2s.

German Commercial Correspondence. S. E. BALLY. 2s 6d

A German Commercial Reader. S. E. BALLY. 2s.

A Commercial Geography of Foreign Nations. F. C. BOON. 2s

Commercial Law. W. D. EDWARDS. 2s

British Commerce and Colonies from Elizabeth to Victoria. H. DE B. GIBBINS. 2s.

The Economics of Commerce. H. DE B. GIBBINS. 1s 6d

Commercial Examination Papers. H. DE B. GIBBINS. 1s 6d

A Primer of Business. S. JACKSON. New and Revised Edition. 1s 6d

An Entrance Guide to Professions and Business. H. JONES. 1s 6d

A Commercial Geography of the British Empire. L. W. LYDE. 2s

A Short Commercial Arithmetic. F. G. TAYLOR. 1s 6d

Précis Writing and Office Correspondence. E. E. WHITFIELD. 2s

Junior Examination Series

EDITED BY A. M. M. STEDMAN, M.A.
Fcap 8vo, 1s

This series is intended to lead up to the School Examination Series, and is for the use of teachers and pupils in Lower and Middle Forms, to supply material for the former and practice for the latter. The papers are carefully prepared to cover the whole of the subject usually taught, and are intended to form part of the ordinary class work. They may be used *ad hoc* or as a written examination

Junior French Examination Papers. F. JACOB.

Junior English Examination Papers. W. WILLIAMSON.

Junior Arithmetic Examination Papers. W. S. BEARD

Junior Algebra Examination Papers. S. W. FINN.

Junior Greek Examination Papers. T. C. WEATHERHEAD

Junior Latin Examination Papers. C. G. BOTTING

A Key to the above. 3s 6d net

Junior General Information Examination Papers. W. S. BEARD

A Key to the above. 3s 6d. net.

Junior Geography Examination Papers. W. G. BAKER

Junior German Examination Papers. A. VORGELEN.

Junior History Examination Papers. W. O. P. DAVIES.

Junior School Books

EDITED BY O. D. INSKIP, LL.D., AND W. WILLIAMSON, B.A.

A series of school class books. They are adapted to the needs of the Lower and Middle Forms of the Public Schools, and are suitable for the use of candidates preparing for the Oxford and Cambridge Junior Local Examinations.

A Class-Book of Dictation Passages. W. WILLIAMSON 1s 6d

The First Book of Kings. A. E. RUBIE 2s

The Gospel according to St. Matthew. Edited by E. W. SOUTH 1s 6d

The Gospel according to St. Mark. Edited by A. E. RUBIE 1s 6d

The Gospel according to St. Luke. Edited by W. WILLIAMSON 2s

The Acts of the Apostles. Edited by A. E. RUBIE 2s

A Junior English Grammar. W. WILLIAMSON 2s

A Junior Greek History. W. H. SPRAGGE. 2s. 6d

A Junior Latin Prose. H. N. ASMAN. 2s 6d

A Junior German Grammar. H. C. A. SECKLER 2s 6d

Elementary Experimental Science. Physics by W. T. CLOUGH; Chemistry by A. E. DUNSTAN. 2s 6d.

Elementary Experimental Chemistry. A. E. DUNSTAN 2s.

A Junior Chemistry. E. A. TYLER 2s 6d

A Junior French Grammar. L. A. SORNET and M. J. ACATOS 2s.

A Junior French Prose. R. R. N. BARON. 2s

A Junior Geometry. N. S. LYDON. 2s.

A School Latin Grammar. H. G. FORD 2s. 6d

English Literature for Schools. E. E. FIRTH. 2s 6d

Methuen's New Historical Series

EDITED BY THE REV. H. N. ASMAN, M.A., B.D.

These are the first volumes of a new historical series for Schools under the General Editorship of the Rev. H. N. ASMAN, M.A., B.D., Second Master of Owen's School, Islington. The series is on the lines of the recent Circular of the Board of Education on the teaching of history.

A History of England for Schools. In Three Volumes. Crown 8vo, 2s. 6d each. Vol I, to 1485. By H. J. CAPE, M.A. Vol II, 1485-1714. By L. OLDERSHAW, M.A. Vol. III, 1714-1910. By E. BOWYER, B.A.

Stories from Ancient History. By E. BOWYER, B.A., B.Sc., Assistant Master Owen's School. Crown 8vo, 1s 6d.

Stories from Modern History. By E. M. WILMOT-BUXTON, F.R.Hist.S. Crown 8vo, 1s 6d.

School Examination Series

EDITED BY A. M. M. STEDMAN, M.A.

Crown 8vo, 2s 6d

These books are intended for the use of teachers and students—to supply material for the former, and practice for the latter. The papers are carefully graduated, cover the whole of the subject usually taught, and are intended to form part of the ordinary class work.

French Examination Papers. A. M. M. STEDMAN. Key. 6s net.

Latin Examination Papers. A. M. M. STEDMAN. Key. 6s net.

Greek Examination Papers. A. M. M. STEDMAN. Key. 6s net.

German Examination Papers. R. J. MORICH. Key. 6s. net

History and Geography Examination Papers. C. H. SPENCE.

Physics Examination Papers. R. E. STEEL.

General Knowledge Examination Papers. A. M. M. STEDMAN. Key. 7s. net.

Examination Papers in English History. J. TAIT WARDLAW.

Stories from the Histories

EDITED BY E. M. WILMOT-BUXTON, F R Hist Soc

With a Map Crown 8vo, 1s 6d each

This series will embrace the history of all the chief countries of the world. It is hoped that by supplying a series of interesting stories these volumes will promote a desire for a more detailed knowledge and remove the general complaint that English children grow up ignorant of the great events and characters in the history of other nations. The first volumes are —

Tales from Irish History.	Stories from French History.
A BIRKHEAD, B A	TAYLOR DYSON, M A

Stories from the Great Writers

EDITED BY E. M. WILMOT-BUXTON, F R Hist Soc

Crown 8vo, 1s 6d each

In this series incidents have been selected from the works of the best writers and abridged or retold to make them appeal to children. It is hoped that these stories will kindle a love for the works of the best writers and stimulate children to read, after schooldays, the originals and others by these authors. The first volumes are —

Stories from Dickens.	JOYCE	Stories from Bunyan.	EDITH
COBB.		L ELIAS	
Stories from Chaucer.	ADA	Stories from the Earthly Para-	
HALES		dise.	EDITH L ELIAS

Stories from Old Romance

EDITED BY E. M. WILMOT-BUXTON, F R Hist Soc

Crown 8vo, 1s 6d each

These volumes will serve as an introduction to world literature as well as form literary readers that will appeal to children between the ages of eight and twelve in all classes of schools. They will also be found suitable gift-books for all young lovers of stirring romance and tales of chivalry. The first volumes are —

Stories from Old French Romance.	E M WILMOT-BUXTON	Stories from Old English Romance.	JOYCE POLLARD
Stories from Old Italian Romance.	SUSAN CUNNINGTON.		

Textbooks of Science

Fully Illustrated. Crown 8vo

A series of textbooks for Secondary Schools and Schools of Science

Practical Mechanics.	S. H. WELLS	3s 6d	Examples in Physics.	C. E. JACKSON	2s 6d
The Complete School Chemistry.	F M OLDHAM	4s 6d	First Year Physics.	C. E. JACKSON	1s 6d
Examples in Elementary Mechanics.	W J DOBBS	5s	Technical Arithmetic and Geometry.	C T MILLIS	3s 6d
Practical Chemistry.	Part I. W. FRENCH.	1s 6d	Plant Life.	H F. JONES.	3s 6d
Practical Chemistry	Part II. W. FRENCH and T H BOARDMAN	1s 6d	A Practical Chemistry for Technical Institutes.	A E DUNSTAN and F B T THOLE.	3s 6d
Elementary Science for Pupils Teachers.	W T CLOUGH and A E DUNSTAN	2s.	Practical Physics: A Laboratory Course for Advanced Students	S S RICHARDSON	4s 6d
Outlines of Physical Chemistry.	G. SENTER.	New Edition 5s	Elementary Experimental Electricity and Magnetism.	W. T CLOUGH	2s 6d
An Organic Chemistry for Schools and Technical Institutes.	A E DUNSTAN	2s 6d	A Concise History of Chemistry.	T P. HILDITCH	2s 6d
A Preliminary Physiology.	W. NARRAMORE.	3s. 6d.			

Textbooks of Technology

Fully Illustrated Crown 8vo

How to Make a Dress. J. A. E WOOD 1s 6d	Builders' Quantities. H. C. GRUBB 4s 6d.
Carpentry and Joinery. F. C. WEBBER. 3s 6d	Répoussé Metal Work. A. C. HORTH. 2s 6d
Millinery, Theoretical and Practical. C. HILL 2s	Electric Light and Power. E. E. BROOKS and W. H. N. JAMES. 4s 6d
Instruction in Cookery. A. P. THOMPSON 2s 6d	Engineering Workshop Practice. C. C. ALLEN 3s. 6d.
An Introduction to the Study of Textile Design. A. F. BARKER Demy 8vo, 7s. 6d	

A Selection from Messrs. Methuen's List of
**BOOKS FOR SENIOR PUPILS
 AND SCHOOL LIBRARIES**

(For the latter see also Messrs. Methuen's Prize Catalogue)

A History of England

IN SEVEN VOLUMES

Edited by CHARLES OMAN, M.A.

Demy 8vo, 10s. 6d. net, each Volume

MESSRS. METHUEN are publishing in seven volumes a new "History of England," from the earliest times down to the year 1900. The History is divided into seven broadly marked chronological periods, each of which is treated in a separate volume. The main object of the writers as a body is to present the reader with a clear narrative based on a careful review of the chief original authorities and the results of the most recent scholarship and criticism, and to observe in their handling a just balance between the purely political, the constitutional, and the social and economic aspects of the national evolution. At the same time special attention is devoted to making the narrative attractive and readable.

Each of the seven volumes contains about 500 pages of text, and is duly equipped with indices, maps, plans, and an adequate bibliography of the leading authorities, original and otherwise.

Footnotes and references are employed where necessary to explain statements, justify conclusions, or indicate important sources of information. Difficult or disputed questions which do not admit of proper treatment without marring the continuity of the narrative, are relegated to special appendices.

The Volumes and their Authors are as follows. —

- I. England before the Norman Conquest.** By CHARLES OMAN, M.A., Fellow of All Souls', Chichele Professor of Modern History at Oxford. [Ready.

- II. **England under the Normans and Angevins (1066-1272).** By H. W. C. DAVIS, Fellow and Tutor of Balliol College, sometime Fellow of All Souls', Author of "Charlemagne." [Ready]
- III. **England in the Later Middle Ages.** By KENNETH H. VICKERS, M.A., Exeter College, Oxford.
- IV. **England under the Tudors (1485-1603).** By ARTHUR D. INNES. [Ready]
- V. **England under the Stuarts (1603-1714).** By G. M. TREVELYAN, late Fellow of Trinity College, Cambridge. [Ready]
- VI. **England under the Hanoverians (1714-1815).** By C. GRANT ROBERTSON, Fellow of All Souls', Tutor in Modern History to Magdalen College, Examiner in the School of Modern History in the University of Oxford. [Ready]
- VII. **England since Waterloo (1815-1900).** By J. A. R. MARRIOTT, Lecturer and Tutor in Modern History and Economics at Worcester College, Oxford.

A History of the Art of War in the Middle Ages. By CHARLES OMAN, M.A., Fellow of All Souls', Oxford, Chichele Professor of Modern History in the University of Oxford. From the Fourth to the Fourteenth Century. With 24 Plates. Demy 8vo, 10s. 6d. net.

Chaucer and his England. By G. G. COULTON, M.A. With 32 Illustrations. Second Edition. Demy 8vo, 10s. 6d. net.

This book is chiefly designed as a picture of Chaucer the man, with a background of the world in which he lived

The French Revolution. By THOMAS CARLYLE. A History in Three Parts—I. The Bastille; II. The Constitution; III. The Guillotine. With an Introduction, Notes and Appendices by C. R. L. FLETCHER, M.A., Fellow of Magdalen College, Oxford. With 9 Maps. Three Volumes. Crown 8vo, 18s.

A completely annotated edition, with a long introduction.

The Letters and Speeches of Oliver Cromwell. By THOMAS CARLYLE. With elucidations. Edited with Notes, Supplement and enlarged Index by S. C. LOMAS, and an Introduction by C. H. FIRTH, M.A. Three Volumes. Demy 8vo, 18s. net.

This edition is brought up to the standard of modern scholarship by the addition of numerous new letters of Cromwell, and by the correction of many errors which recent research has discovered

The History of the Decline and Fall of the Roman Empire. By EDWARD GIBBON. Edited, with Introductions, Notes, Appendices, Index, and Maps, by J. B. BURY, M.A., Litt.D., LL.D., Regius Professor of Modern History at Cambridge. Illustrated. In Seven Volumes. Demy 8vo, gilt top, 10s. 6d. net each. Also crown 8vo, 6s. each.

A History of Egypt. By W. M. FLINDERS PETRIE, D.C.L., LL.D., Edwards Professor of Egyptology, University College, London. Fully Illustrated. In Six Volumes. Crown 8vo, 6s. each.

This history aims at being a student's reference book, which shall suffice for all ordinary purposes, while the information is given in such a way that the general reader may readily grasp it. Every fact and object has an authority stated for it.

- A Sketch of Egyptian History from the Earliest Times to the Present Day.** By Lady AMHERST of Hackney With 30 Illustrations and 2 Maps. A New and Cheaper Issue. Demy 8vo, 7s. 6d. net.

A digest of the history of Egypt for travellers and students who have not time to consult the more voluminous works. The Nile sources and the course through which it flows are described, and the rulers traced from the earliest King to the present Khedive.

- A History of Russia from the Birth of Peter the Great to the Death of Alexander II** By W. R. MORFILL, M.A., Oriel College, Oxford. With 12 Maps and Plans. Crown 8vo, 3s. 6d.

The book is founded on a study of original documents. A short summary of events has been added to bring it down to the present time.

- The Republican Tradition in Europe.** By H. A. L. FISHER. Crown 8vo, 6s. net.

In this book Mr. Fisher describes the course of Republican ideas in Europe from the fall of the Roman Empire to the foundation of the Republic of Portugal.

- English Architecture.** By T. D. ATKINSON, Architect. With 196 Illustrations. Fcap. 8vo, 3s. 6d. net.

This history is intended for the use of those who have no previous knowledge of the subject. It consists of, first, a description of the various styles from Saxon times to 1800, and, secondly, an account of particular classes of buildings—churches, religious houses, and private houses. There are many illustrations, chronological tables, a glossary, and a general index.

- Schools of Painting** By MARY INNES. With 76 Illustrations. Second Edition. Crown 8vo, 5s. net.

This book is intended for schools, students, and the general reader, and offers a general view of the development of painting in Europe from the first century A.D. to the beginning of the nineteenth.

- A Primer of Tennyson.** With a Critical Essay. By W. MACNEILE DIXON, Litt.D., LL.B. Third Edition. Crown 8vo, 2s. 6d.

A short biography is followed by a critical examination of the poems and plays. An appendix contains a full bibliography.

- A Primer of Wordsworth.** By LAURIE MAGNUS, M.A. Crown 8vo, 2s. 6d.

A short biography and critical essay on the poet's works.

- The Political Thought of Plato and Aristotle.** By E. BARKER, M.A. Demy 8vo, 10s. 6d. net.

The author traces the history of political thought in Greece to its culmination in Aristotle. Stress is laid on the teaching of Plato, and on Aristotle's debt to his predecessor; but the bulk of the work is occupied by an exposition of the leading ideas of Aristotle's *Politics*.